# THE ARCHITECT & BUILDING NEWS

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- CURRENT MEASURED RATES

APRIL 30, 1953 · VOL. 203 · NO. 18 · ONE SHILLING WEEKLY



#### Australia House-

Foundation Stone laid by H.M. King George V, 24th July, 1913
Officially opened by H.M. King George V, 3rd August, 1918

Architecte:—A. Marshall MacKenzie, & Son, F.F.R.I.B.A.

Britannic Floor Springs are again being used in the re-construction and modernising of Australia House



WILLIAM NEWMAN & SONS Ltd. HOSPITAL STREET, BIRMINGHAM 19. Established over 200 years.



A design for a lift to carry both personnel and materials. Construction of the lift shaft is most substantial, but the hoisting mechanism is perhaps a trifle sketchy.

By Jacques Besson, French mathematician and scientist, 1659.

Photo by courtesy of Picture Pos

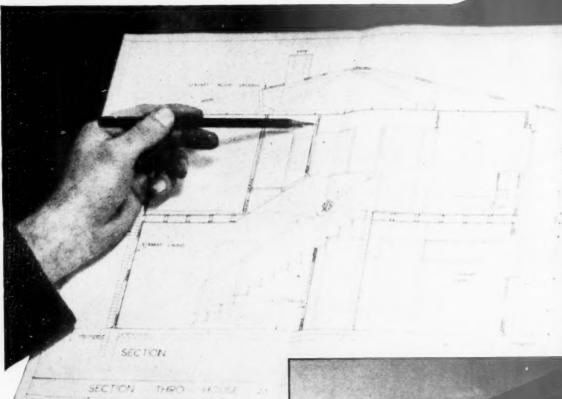
for the most modern interpretation of vertical transport

Lifts and Escalators



LIFT AND REFRIGERATING ENGINEERS DARTFORD KENT

"We used Stramit here ... it's easy to erect and gives excellent thermal insulation"



As a roof decking and partitioning material Stramit is unequalled. Consider these advantages. It can be pre-cut to size before delivery to save time at the site. It requires framing at 4' centres only, and boards can be supplied up to 18' in length. Stramit gives low cost dry construction and when erected is ready for immediate decoration.



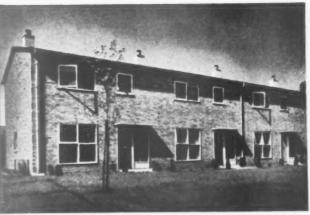
Terrace houses at Uxbridge designed by Messrs, Yorke, Rosenberg and Mardall.

Model By Laws Section 50, sub-sec. 3 approve roofs constructed of Stramit and weather proofed with an asbestos based roofing felt to B.S.S. 747.

STRAMIT BOAL BOOK

PACKET BOAT DOCK, COWLEY PEACHEY, UXBRIDGE, MIDDLESEX

Telephone: West Drayton 3021-2-3



Flashings and hoods, rainwater goods and weatherings - from roof to foundations zinc plays an important part in building. Our illustrations show contemporary houses roofed with zinc laid on the standing seam system. The roofing of the Cowley Peachey houses has an added interest because it has been laid on insulation boarding to combine good insulation with lasting protection.



HOUSE AT LUCCOMB, LO.W. View from South-west. Architect and owner—F. R. S. Yorke, F.R.I.B.A.

There are now no restrictions on the use of zinc. Supplies are plentiful and are likely to remain so for many years to come.

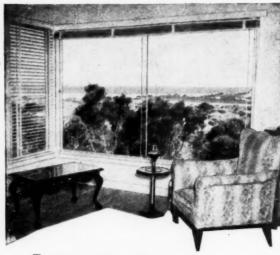
The price of zinc has dropped considerably and it is again one of the most economical roofing materials.

The Zinc Development Association will be pleased to send to potential users lists of stockists of all zinc building materials and of firms specialising in zinc work.



ZINC DEVELOPMENT ASSOCIATION · LINCOLN HOUSE · TURL STREET · OXFORD · Tel. 47988

## Include the NEW SLIDING WINDOWS on the Specification..



THESE Sliding Windows which have been in production in Australia for some time are new to the English market. The principal is such that panels of in plate or 7/32in, drawn class are hold in the double hard alley channel at the top. At the bottom there the hold. On these, the panels stainless steel ball bearing are hold, on these, the panels slide easily, surplus water draining over the lower outside edge of the channel. For additional weatherproofing, plastic channel strips can be fitted to edge of inside panel when necessary.

#### Allday "Sliding Windows" have the following advantages:-

WUNOBSTRUCTED, WIDER AND CLEARER VISION Sliding Windows give complete vision. The absence of astragals, etc., ensures this.

COMPLETELY RUST-PROOF - LESS TO PAINT

Hard alloy channels and stainless steel ball-bearings mean that the frame is completely rustproof. A most important factor in industrial areas.

LARGE SAVING IN INTERIOR LIGHTING

Extra daylight is admitted owing to the unobstructed vision—this meaning a large saving of interior lighting and consequent economy.

EASILY ACCESSIBLE FOR CLEANING FROM INSIDE

As the panels both move the entire width of the windo and therefore cross each other, it is extremely eas for both the inside and outside of the panels to be cleaned from the inside.

PANELS INSTALLED OR DISMANTLED IN SECONDS Panels may be installed or lifted out from the inside, which, in multi-storey buildings, means a great saving

SOUND CONSIDERABLY ELIMINATED WHEN CLOSED

Owing to the extra thickness of the plate glass, the is added protection against outside noises.

ECONOMY IN COST

Although the initial cost is slightly more than a normal window, the long-term saving in interior lighting, painting, etc., plus the advantages of such a beautiful window, makes the window an economical proposition.

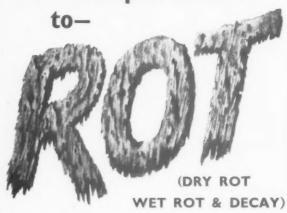
### P. G. ALLDAY & Co., Ltd.

NORTHWOOD STREET, BIRMINGHAM, 3

'Grams FIRM BIRMINGHAM

AN EXHIBITION MODEL IS NOW ON VIEW AT THE BUILDING CENTRE - STORE ST., W.C.I.

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#### There are 3 kinds of Solignum

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# "PERMANITE" SUPPLY AND LAY ROOFING TO ANY SPECIFICATION

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THE ARCHITECT and Building News, April 30, 1953

### L.C.C. KEEP DOWN MAINTENANCE COSTS AT NEW POPLAR PRIMARY SCHOOL—

With Extra Strong Tubular Steel Furniture by Shepherd





It's Phosphate Coated for Long, Rust-proof Life

The Dining Hall at the new L. C. C. Susan Lawrence Primary School. Extra strong tubular steel furniture by Shepherd combines modern good looks with immense strength—keeps maintenance costs down.

THE recently opened Susan Lawrence L.C.C. School at Cordelia Street, Poplar, has a dining hall equipped throughout with Shepherd tubular steel chairs and tables. The result is that replacement and maintenance costs, normally an important expense item in schools, are reduced to a minimum. Morever, the chairs are scientifically designed, with pre-formed plywood seats and backs. They are constructed to encourage correct posture, are virtually non-tipping and are easily cleaned.

**Phosphate Coating** 

Shepherd furniture combines immense strength with modern good looks and finish. The strength comes from the highest grade steel tube, formed on the most up-to-date machinery. And the looks *last*.

For every piece of Shepherd furniture is given a special phosphate coating treatment before the stove enamel finish is applied. Because of this extra protection, Shepherd tubular steel furniture has a long rust-proof life.

All the units are light and easily handled—even by children, and the chairs nest neatly on top of one another, fifteen in the space of one. Shepherd furniture can be supplied in any colour on the B.S.S. Colour Chart—and the prices are very competitive. Write today for an illustrated catalogue.

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# CERREEN SATIN EMULSION

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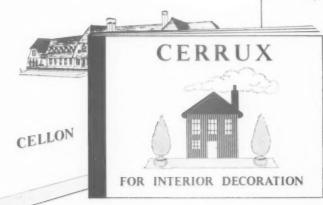
are pleased to announce the addition of

# a New Finish

to their range of Decorating Paints

Cerreen is a synthetic-resin water emulsion coating, easy to apply, exceptionally durable and offering an entirely new standard in emulsion type paints. For many months Cerreen Satin Emulsion Paint has been subjected to tests under all possible conditions and it is now assured that in its own field it will match the high reputation already established by the well known Cerrux Decorative Finishes.

Supplied in a range of pastel shades, Cerreen is ideal for all wall surfaces. It has excellent adhesion and can be applied to most porous or non-porous surfaces—wood, plaster, concrete, asbestos sheeting, wallboard, brick, glass or any previously painted surface. It can be applied by brush, roller, or spray gun.





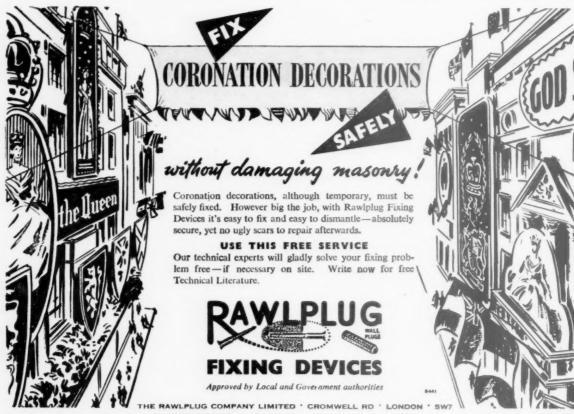
- \* Dries in 2 to 3 hours.
- \* Second coat can be applied after 3 hours.
- \* Requires no primer (except on metal) and no undercoat.
- \* Ready mixed—easy to apply.
- \* No special thinner-only clean water.
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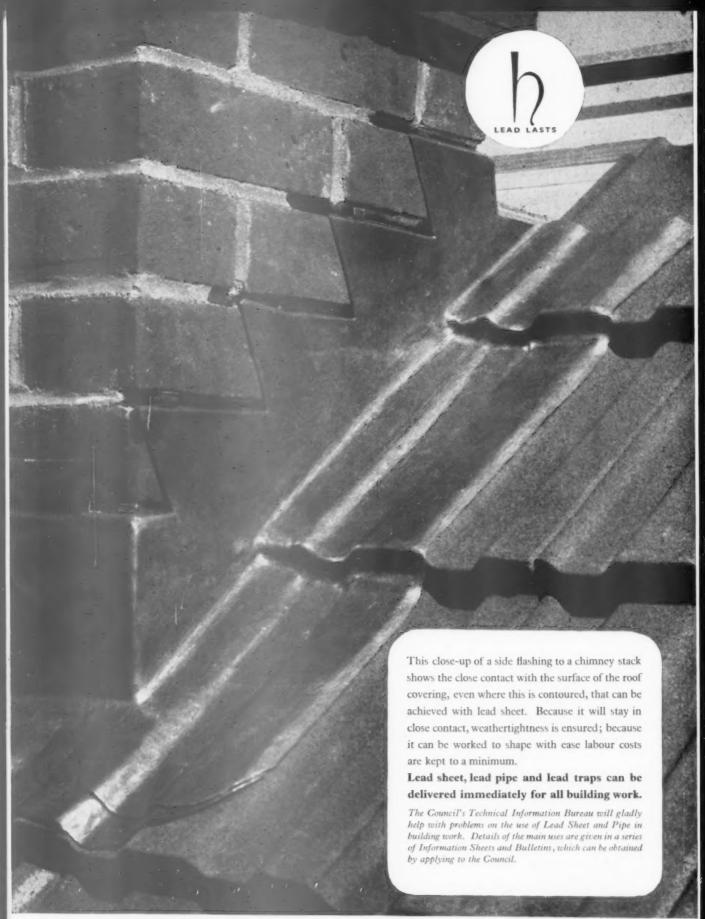
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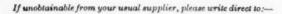
Aden, Barbados, Ceylon, Dar-Es-Salaam, right the way through from A to Z, ending up very properly with Zanzibar.

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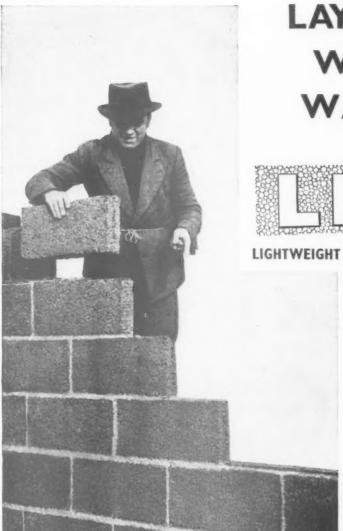
For each insulating purpose Slagbestos is available in suitable form—slab, blanket or loose, and in each case insulation (thermal or sound) is uniformly high.

Slagbestos is fireproof, rotproof, non-hygroscopic, odourless. And — highly important — it can be handled safely and with ease — because it does not harm or irritate the hands! Send for full details.

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LECA aggregate has a K. value of .9. The K. value of dry LECA concrete of a mix of 9 to 1 and weighing about 50 lbs. per cubic foot is approximately 1.3.

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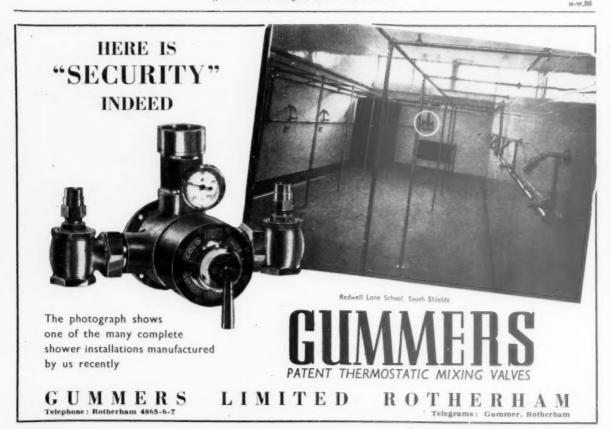
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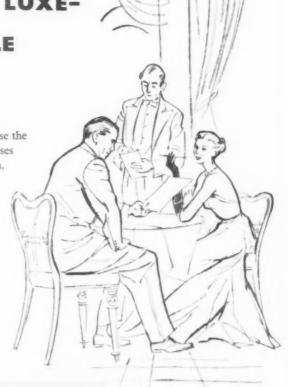


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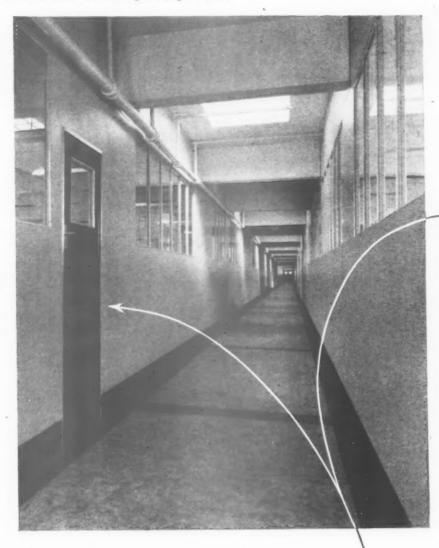
Quarry Tiles, will be officially opened on May 15, 1953, by Mr. John Profumo, M.P., Parliamentary Secretary to the Minister of Civil

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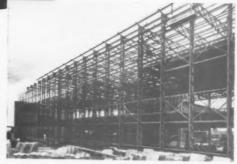
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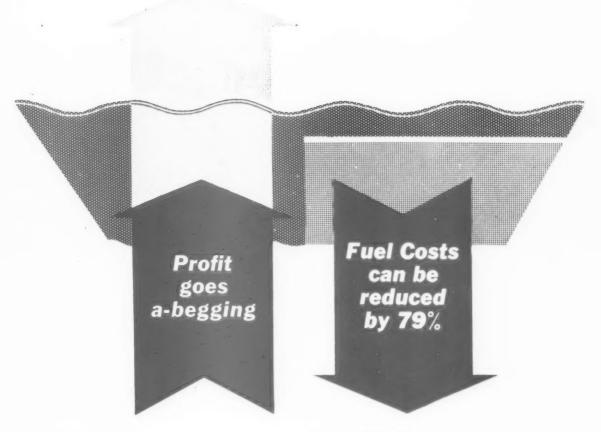
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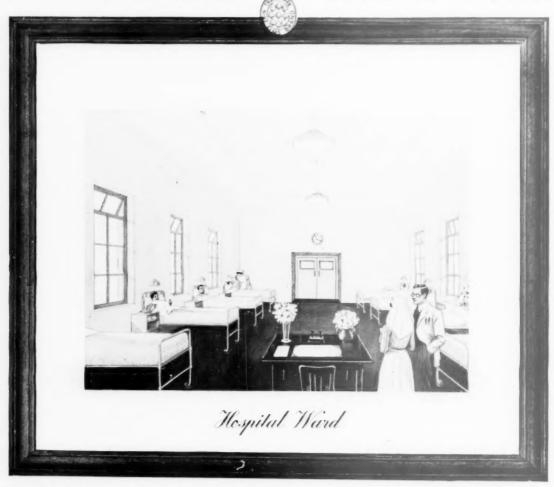
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# Economy in Steel

The Ministry of Works' publication 'Economy of Building Materials' (S.O. Code No. 67-26) has drawn attention to the substantial saving in steel effected by the use of tubular steel construction in footbridges, shed work and single-storey workshops.

Tubewrights Limited were established by the parent company, Stewarts and Lloyds, specially to develop the structural use of steel tubes and over a number of years they have been producing welded tubular steel structures of the type recommended.

Tubewrights' engineers are available for consultation and will assist with design.

A Tubewrights' tubular steel
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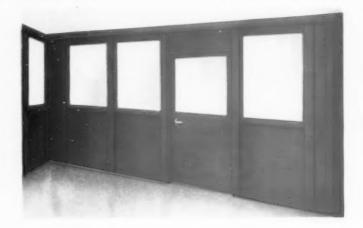
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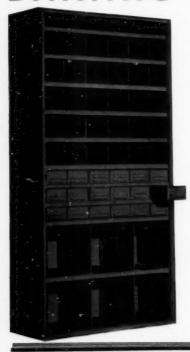
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N S E Partitioning has everything to recommend it. It is economical, beautifully finished, and makes a rigid, vibrationless structure and can be readily erected or dismantled and re-erected if required. Available in a double skin construction (flush finish both sides), or single skin construction, as illustrated. Both types, 7ft. 2in. or 8ft. 2in. high, or as specified. Doors are double-skinned, with good quality fittings. Glazed in obscured or clear glass. Mesh can be used if preferred.

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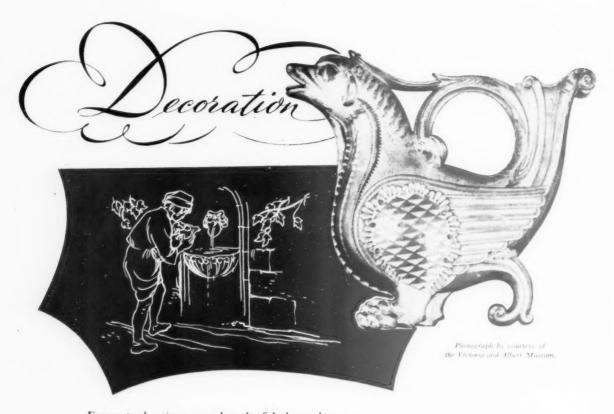
—a full length bed with comfortable spring mattress in 3 foot or 4 foot widths, which folds up flat in one easy movement. Supplied ready for simple installation into a shallow alcove.

A luxurious "Put-u-up" spring interior mattress ensures utmost comfort and the whole bed, with bedclothes made up, can be folded back into position ready for use.

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#### HERMATOR SUPER GLOSS PAINTS, full-bodied,

free-flowing finishes of exceptional brilliance,

retain their colour and elasticity

in the face of age and every climatic extreme.



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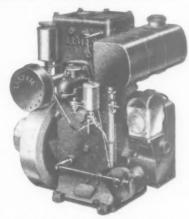
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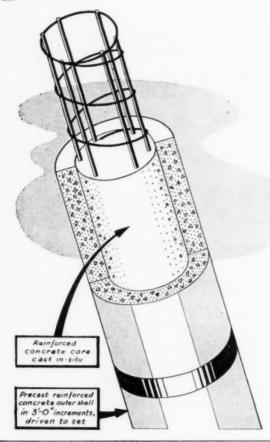
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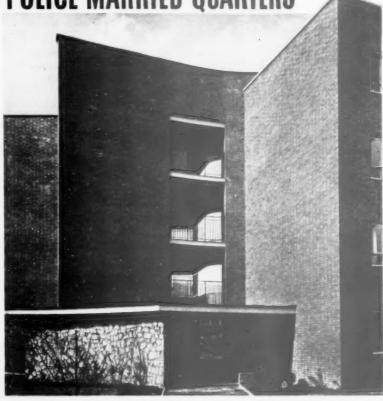
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#### CLEANING THE BIG SMOKE

CCASIONS sometimes make excuses for action which, without the direct incentive, would not be taken. The Festival of Britain came a little too soon after the war depressions to provide the full urge to clear up the streets of London; economically the time was not propitious. The Coronation has brought another opportunity which, although the economic background has not improved greatly, has been taken by many, including private persons and public bodies.

The "big smoke" is not just a slang term for the conurbation that is London, it is also a literal description of an actuality which forms the chief menace threatening continuously the cleanliness and surface appearance of the twin cities and their surrounding rings. That it can, on occasions when meteorological factors combine in certain unfortunate ways, be a sudden threat to life itself, was brought out by the disastrous fog last year, a phenomenon still awaiting full and adequate analysis. What is not so evident, to any but the thoughtful, is the effects of smoke dust and chemical aerial effluents which are always with us; that all day and every day the steady action goes on; that stone is eaten into, that paint oxidises and peels off, that iron rusts and even non-ferrous metals have a life that is shortened.

There are a number of signs that an onslaught greater than normal is being made on the dirt and grime of London and there seems greater activity in the washing, scraping, painting and refurbishing than is usual at this springtime season. It is, we have no doubt, a general wish to put on the best bib and tucker for the forthcoming celebrations.

We would not wish now to argue all the pros and cons of washing down stone buildings; even the experts have different detailed ideas. There is, however, a general concensus of opinion that washing with plenty of plain water can do no harm and certainly cleans up the building. As the B.R.S. says "Washing is certainly beneficial. Whether it is expedient must be decided in the light of circumstances." They have also said ".... when, as in many Portland stone buildings in London, the stone, though discoloured, has remained in good condition in the ordinary course, and may be expected by comparison with older buildings to remain so for many years to come, a decision on whether or not it should be washed regularly can be decided on the score of appearance rather than on financial grounds."

This question of appearance of stone buildings in London is very fundamental to the character of the metropolis. The facial appearance of London is determined by the fact that it was built at many different times and is a coagulation of many small nuclei of villages and towns. The three materials which mainly decide its character are Portland stone, the stock brick and stucco. The black, white and silver grey effects which weathering produces on the stone are among the most striking features of many of our old buildings. It would seem that nature, lacking the help of the strong sunlight of more southern regions, has provided an alternative emphasis for the modelled forms of the architecture which for nearly four hundred years we have borrowed from those sunlit parts and adapted for our own

There is therefore a great deal to be said, as far as Portland stone is concerned, for leaving well alone. There were some who were made very uneasy by the drastic methods adopted for the postwar cleaning of the National Gallery; we wonder what sort of outcry there would be if it was proposed to do the same thing with St. Paul's Cathedral and the Banqueting House. These two buildings have taken on an extraordinarily orderly, well-defined and familiar pattern of "black and white." Apart

altogether from the scientific aspect of protection and preservation we are inclined to agree with the Cockney who was heard to say, "I ain't so sure abart this 'ere stone-washin' lark, t'ain't every geyser what wants to 'ave their fice lifted."

All, we believe, would agree that the mellow and weathered quality of stock brickwork should never be lost and even when it is repointed it should be done with extreme expertness and circumspection.

Stucco, on the other hand, can never be repainted too often; it is its very life. What can look better than a stucco building or terrace with new or carefully maintained paintwork. A walk around London at the moment will reveal architectural effects which have not been seen for many a long year. The great terraces of Carlton House and Regent's Park are not the only cases in point. But they point something else; the effects are partly due to the uniformity of the treatment in both colour and time. For repaint-

ing can be a dreadful menace to a square or a terrace even when the buildings are not designed as an architectural whole. Individualism may be a virtue of the British, but it should not extend to un-neighbourly rudeness in paint. Some ways should be found for reasonable control of colour in streets and for the periods of renewal of the paint. It was at one time contemplated that violent changes in character by means of paint should fall within the orbit of the clauses of compensation and betterment and, therefore, development charges; but all that was shelved and there seems nothing left to take its place, except commonsense and the long-term policy of education.

Whatever the snags and difficulties of all this cleaning-up, we can at least be thankful for it and urge that the good work goes on because it is a good thing to do; the next "occasion" may be some way off and efforts should not rely too much on fortuitous "excuses."

### EVENTS AND COMMENTS

#### A PEEPSHOW DENIED

One of the best Coronation Souvenirs that I have so far seen is the Picture Post Coronation Peepshow Book published by the Hulton Press. Can you obtain a copy? No, for it is already out of print and I am told that it is not proposed to print a second impression. The peepshow is of the inside of the Abbey. Viewed from one end it shows the crowning ceremony and from the other the procession passing through the nave. The scene is beautifully drawn and coloured and was designed by Edwin Smith, who, besides being trained as an architect, worked for a time on the A. & B.N. He also took the photographs in "English Parish Churches." Miss Olive Cook helped with the peepshow contributing a commentary on the Ceremony and Regalia with illustrations. The book is charmingly produced and is priced at 5s. I sincerely hope that the Hulton Press will reconsider its decision not to print any more. Good Coronation Souvenirs are very scarce and as I said above this is one of the best.

#### "NEWS CHRONICLE" CORONATION HOUSE

The results of the News Chronicle Coronation House competition, at least the house designing part of it, are given on another page. I hear that there were five hundred entries all of which will be shown at the Building Centre some time in June. Five architects have been awarded prizes in the competition. Five other architects have been commissioned to design houses incorporating the best of readers' ideas for house design. This having been done readers of the News Chronicle will be asked to place all ten designs in order of merit. The one receiving most votes for first place will be built and presented to the winner of the "final contest in the series."

#### MR. W. HANNEFORD-SMITH

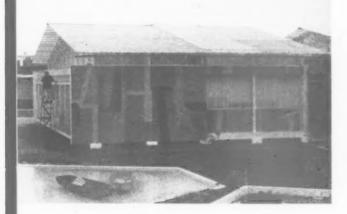
Messrs, B. T. Batsford announce that Mr. W. Hanneford-Smith is to retire from taking an active part in the firm's day to day affairs. He will, however, retain his directorship and be available to give advice. Mr. Hanneford-Smith has been with the firm for sixty years and to mark the occasion his fellow directors are presenting him with his portrait. All readers of Batsford books will join his personal friends in wishing Mr. Hanneford-Smith a long and happy retirement.

#### FESTIVAL GARDENS, STAGE I

The Festival Gardens proper do not open until the middle of May. I suppose that I should have known this but I found out the hard way by going these to spend the evening. At present only the fun fair is open, and that only at weekends. Some of the plaster and hessian rocks on the side shows are a bit tatty but in general the official architecture of the place has stood up well to two winters. Most of last year's rides are there and there is a new one which consists of a number of arms carrying open cars for six each, the whole rotates pretty fast and raises and lowers its arms at the same time. I did not try it. There is a splendid example of a genuine roundabout built in 1897 which has a proper organ. The only change from the original being that electricity has replaced steam for driving it. Looking over the fences which cut off the Pleasure Gardens I could see that preparations are reasonably well advanced. I hear that the obelisks in the central vista are this year to be without their plumes of steam. This is a pity.

#### MR. ROBERT MATTHEW

Although Mr. Robert Matthew's appointment to the Chair of Architecture at Edinburgh University was announced some time ago circumstances have fortunately for us kept him in the south, but now he is gone and we shall miss him. At the meeting of the L.C.C. held on April 21 the Chairman of the General Purposes Committee spoke of Mr. Matthew's distinguished services to





the council during his six and a half years in office, and the leader of the opposition supported him but could not resist a crack at the external appearance of the Royal Festival Hall. Mr. Matthew replied and in turn thanked his staff for the support that they had given him. To say that Mr. Matthew was lucky to be at the L.C.C. during such momentous years in no way detracts from the excellence of the work he has done there. Although he may have had a great deal of administrative work to do no other architect had during that period so many opportunities. These Mr. Matthew took with both hands and it is enormously to his credit that the reputation of the L.C.C. stands so high architecturally to-day. Royal Festival Hall, his most important individual mark, is closely backed by tremendous school development and by a veritable revolution in housing. Edinburgh is not really far away but most of us never go there; we must therefore rely on Mr. Matthew to visit us at regular intervals or we shall be poorer and less happy.

#### THE BRITISH ARCHITECTS' CONFERENCE

This affair, more familiarly but less correctly known as the R.I.B.A. Conference is, as you all should know, being held at Canterbury and Folkestone from June 10 to 13. The organizers, led by their chairman, Mr. R. W. Paine, president of the South Eastern Society of Architects and Principal of the Canterbury School of Architecture, are



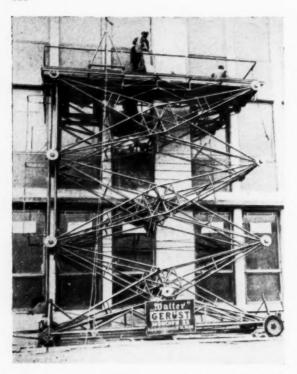
Above: Inn sign designed by Miss Herry Perry for "The Kenilworth Castle," Shepherds Bush, a new public house; architect: F. W. Hanover, L.R.I.B.A. The internal wall finish is as follows. "Weyroc" panels are secured to framed battens fixed to the brickwork. "Formica" panels are veneered to the "Weyroc" with "Impact" adhesive.

Left: An-all plastic bungalow at the Milan Fair, which opened on April 12. Top picture, general view, with plastic boats in Foreground, and below it bathroom in which everything except the soap is in plastic.

taking a lot of trouble to make the Conference more professionally worth while without upsetting the pleasant social functions for which it is best known. The theme of the Conference is School Building and the various papers which are to be contributed will be circulated in advance and not actually read at the Conference but used as a basis for discussion. A real effort is being made by all concerned to meet the usual criticism that the Conference is unproductive and nothing more than a busman's holiday. It appears that in drafting the papers far wider issues than "schools" have been touched upon and the various changes in both local authority and private offices are likely to be mentioned. This in turn is expected to lead to discussion of the ways in which the architectural profession can be reorganized to meet present and future building programmes, how to keep private practice alive, how to keep the designer close to the job and so on. It is felt that if architects realize the type of discussion which is likely to take place more of them will want to attend the conference.

#### BUCKINGHAM PALACE

At a time when, whether from personal interest or because we do not want to be caught out by our children, we are all brushing up our history and knowledge of the Royal Family, a lecture on Buckingham Palace is bound to be of interest. Mr. H. Clifford Smith, speaking at the R.S.A. last week, provided me with a number of pieces of information and put me right on several points of architectural interest. In the first place the palace stands on the site of the original Mulberry Garden planted by James I as part of his great effort to start a silk industry in this country. I have always been a bit muddled about the exact history



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of the Marble Arch. I knew that it once stood in front of the palace but I did not know that Queen Victoria's standard flew from a flagstaff on its summit, nor that it was intended to replace the flagstaff by an equestrian statue of George IV. When in 1847 a new wing was added to the palace the Marble Arch was pulled down and stored for more than two years before being erected on its present site. In his paper Mr. Clifford Smith stressed the very important part that Queen Mary played in making the inside of Buckingham Palace what it is to-day.

#### CORB EXHIBITION

In his eulogy on the occasion of the presentation of the Royal Gold Medal to Corb, Sir Herbert Reid described him as a poet and painter as well as an architect. The current exhibition at the I.C.A. gallery in Dover Street is of non-architectural works by Le Corbusier, the first time that an exhibition of his paintings has been seen over here.

The earliest designs shown are austere architectural drawings in pencil, which developed into flat abstract designs during the time when he was associated with Ozenfant. There are a number of water colour and crayon designs, one at least a near-Braque, but Corb's colour has never reached the level of that master, nor of Picasso nor his friend Léger, the painter of the murals in the U.N.O. building, New York.

The large canvases in oil, showing Léger's influence, are powerful designs in strong, raucous colours. I was sorry that the single tapestry in the show had not been cleared by the customs when I saw the exhibition, as this technique is probably an improvement on the oil paint texturally.

Not the least interesting is a series of mock-up lithographic illustrations for a forthcoming *Verve* publication of Corb's poem, "The Poem of the Right Angle, 1948-52."

ABNER

#### NEWS OF THE WEEK

#### British Industries Fair

Every year the British Industries Fair comes round and the technical Press dutifully turns up in an endeavour to find out whether there is anything new which is of interest either to the architect or to the builder. As a rule there is little which has not been seen before, and one is driven more and more to the conclusion that the Fair is of interest mainly to the buyer from abroad who wishes to have a look at British products in general rather than to see what is available for any particular industry.

This need not be taken as any sort of criticism of the Fair as a whole, but it must be remembered that the Building Industry is pretty well served with exhibitions. Every year there is the Ideal Home—a very proper place at which to announce any developments in household equipment—and in alternate years there is the Building Exhibition, which is the logical place to demonstrate developments in structure and materials. In addition to these two there are the Plant exhibitions which the Ministry of Works sponsors twice a year or more at provincial centres, and the various other specialized shows of lighting, mechanical handling, plastics, builders' plant and similar

subjects. Is there, then, any real need for the architect or the builder to treat the Fair as an essential show which must not be missed? The answer must be No, unless two full days are looked upon as a reasonable investment for people who wish to be completely up to date. Anyone who takes the Fair seriously should go both to Olympia and Earls Court. At the first there are all the office appliances, plus pottery and glass, while at the second are the plastics, the textiles and fabrics, the prefabricated houses (these mainly for export) and all the furniture. Castle Bromwich includes everything else, but in such a large area that a day is not too much, and even then a good deal is almost bound to be missed. three acres outdoors for the builders' plant, and a building section where one will find many of the firms with which one has dealt for years, but it is also essential to look at the hardware section for the plumbing goods and ironmongery, in the electrical section for wiring systems and lighting equipment, and in the engineering section for developments in steel structures and light alloys.

The Fair opened on Monday of this week, and, as always with exhibitions, the stands are not complete until the early hours of the same morning, and

not always then. A press day on the Friday before is of very little help, and this year was no exception. About one-third of the stands were complete, and were staffed with people who could answer questions, one-third were finished and sheeted, while the re-mainder were scarcely begun. At this stage, therefore, there is little one can say except that the whole Fair is much as usual, but with a spate of Royal portraits and souvenirs, many, as one would expect, in quite execrable taste. So far as Castle Bromwich is concerned, the architect-designed stands seem to be rather fewer, but in spite of this the general standard of display seems to be improving. Quite a number of firms remain faithful to the stands which they have been using in past years, a few of them look as though they had been dusted off each year since the Fair started in 1915, but in only a few is it difficult to differentiate between the smart display techniques and what is being shown. So far as the building industry is concerned there are few developments of major importance, and the new devices are mainly confined to improvements in existing models. Such items as there are will be reviewed next week, when there will have been time to obtain photographs and information.

# "News Chronicle" Competition

In the competition for the design of a house of either one or two storeys, within 1,000 sq ft at a cost of 50s per foot super, 527 designs were assessed, 166 for one-storey houses and 361 for two storeys. The assessors were Mr. Louis de Soissons, R.A.; Mr. Herbert Tayler, A.A.Dipl., F.R.I.B.A.; and Mr. J. L. Womersley, A.M.T.P.I., A.R.I.B.A., City Architect, Sheffield. Prizes of 150 guineas were awarded to the following Mr.

to the following: —Mr. Andrew Jack-son, A.R.I.B.A., East Kilbride (onestorey); Mr. Brian Smith, A.R.I.B.A., Winchmore Hill (two-storey); Mr. John Bruckland, Edmonton (two-storey); Mr. John Morton and Mrs. Kaethe Morton, Wallingford (one-storey); and Mr. Herbert Morel, A.R.I.B.A., Sidcup, (one-storey). The Assessors reported that the standard of design in bungalows was much higher than in the houses; no design submitted was per-fect, but those of the five winners were considered to offer the most reasonable solution. In addition, the News Chronicle had commissioned designs from the following: Mr. Harry Braddock, A.A.Dipl., A.R.I.B.A.; Mr. G. Grenfell Baines, A.M.P.T.I., Grenfell A.R.I.B.A.; Mr John Grey, F.R.I.B.A.; Miss Judith Ledeboer, A.R.I.B.A.; and Mr. Brian Peake, A.A.Dipl., F.R.I.B.A.

The ten designs will be published in the *News Chronicle*, and readers will be invited to place them in order of

preference.

The entries will be judged by: Miss Phyllis Garbutt, A.R.I.C., Principal of the Good Housekeeping Institute; Mr. David Goddard, A.R.I.B.A., Vice-Principal of the Architectural Association School; Miss Margaret Sherman, News Chronicle Home Expert; Dr. Stephen Taylor, News Chronicle Medical Correspondent; Mr. F. R. Yerbury, O.B.E., Hon. A.R.I.B.A., Director of The Building Centre, London.

### Town and Country Planning Association

A colour film of London's New Towns was shown at the Planning Centre on Tuesday, April 21, to an audience of over seventy-five people. The film was made by Mr. John Chear, a distinguished amateur, who is Hon. Treasurer of the Royal Photographic Society.

The film showed different layouts of houses and shopping centres in the new towns. It began with shots of the low-density development in the pioneer Garden City of Letchworth, founded fifty years ago, and included the later developments in Crawley, Harlow, Hatfield, Hemel Hempstead, Stevenage and Welwyn Garden City.

Although Mr. Chear was introduced as an amateur there is nothing amateurish about his photography, nor can it be said that all his shots were taken in sunshine, some of the most impressive shots of the new towns were taken with snow on the ground and actually

falling. Indeed, it should be mentioned that many of the shots were taken from a moving car, the unevenness due to movement being minimized by running the camera at four times the usual speed. Perhaps the most beautiful of Mr. Chear's shots were those with which he backed up his plea for more wild country in the new towns, some shots of wild birds of which any ornithologist would be proud.

#### News from Birmingham

Mr. Sergei Kadleigh's talk on "High Paddington," as announced in the A. & B.N. of April 23, took place at the School of Architecture, the President of the Birmingham and Five Counties Architectural Association, Mr. C. E. M. Fillmore, J.P., F.R.I.B.A., in the Chair.

Mr. Kadleigh's paper was received with thundering applause. Mr. Douglas Jones, in giving the vote of thanks, could claim to have been Sergei's Year Master, way back at the A.A.

Everybody felt highly stimulated, and during the discussion and the following tea party nobody even attempted to prick holes into the scheme and the only thing all wanted to know was further details of how it could all be put into practice.

The subject of "High Paddington"

The subject of "High Paddington" is, of course, well known to readers of the A. & B.N., but let us stress one important aspect of Mr. Kadleigh's paper: The need to return to proportion as the basic requisite for restoring our buildings to a place which will "unanimously be associated with the word 'art'".

#### **Building Byelaws**

In a circular (30/53) to local authorities, the Ministry of Housing and Local Government refers to Circular No. 82/52 commending new model building byelaws to the local authorities and stressing the need for submitting drafts of fresh local byelaws at the earliest possible date.

earliest possible date.

While the response to the request for early submission of drafts has generally been satisfactory, it will not now be possible to confirm by June 30 byelaws which have not yet been submitted, and in all the circumstances the Minister has decided to extend, where necessary, the operation of existing byelaws until December 31, 1953, and an order to that effect will be issued in due course.

The need for new local byelaws is, however, still most urgent and the Minister trusts that the local authorities who have not yet submitted drafts will do so at the earliest possible date.

#### Building Plant Exhibition, 1953

The Building Plant Exhibition for 1953, organized by the Ministry of Works, will be held on the Goose Fair Site at Nottingham from September 3 to September 9. The site is within a few minutes' bus ride from the Civic

Centre and the main railway stations. Building plant and equipment will be shown and many machines will be demonstrated in action.

The exhibition will occupy an area of 200,000 square feet and there is an additional area of some 20,000 sq ft for demonstrating tractors, scrapers, earth augers, powered barrows, etc.

#### Royal Academy Elections

Mr. Louis de Soissons, O.B.E., A.R.A., F.R.I.B.A., has been elected R.A. Mr. Basil Spence, O.B.E., A.R.S.A., F.R.I.B.A., has been elected A.R.A.

#### Tendering Without Quantities Modification of London Rule

At a special general meeting of the L.M.B.A., held at 47, Bedford Square, last week, it was decided to modify the National Quantities Rule, so far as London is concerned, by permitting tendering without provision of bills of quantities for the construction of single dwelling-houses having a maximum floor area (living space) of not more than 1,500 feet super. The L.M.B.A. Quantities Rule now reads as follows:—

Members shall not tender in competition for contracts exceeding £3,000 in total value without bills of quantities being supplied. In the case of contracts for the repetitive construction of small dwelling-houses the Bills of Quantities shall be prepared in accordance with the principles of the code for the Measurement of building work in Small Dwelling Houses. This instruction shall not apply to contracts for repairs or contracts for painting or decorating only, and shall not apply to the construction of single dwelling-houses having a maximum floor area (living space) of not more than 1,500 feet super.

#### APPOINTMENT

Mr. W. H. Gillespie, L.R.I.B.A., Burgh Architect to Alloa Town Council, has been appointed to the recently created post of Architect and Planning Officer, Stirling.

#### ANNOUNCEMENT

Mr. Peter McG. Corsar, A.R.I.B.A., has opened a branch office at 237, London Road, Waterlooville, Hants. (Tel. Waterlooville 2023.)

D. C. Denton-Smith and Partners, Chartered Architects, Surveyors, 40, Regent Street, Cambridge, have opened a branch office at No. 5, Lynn Road, Ely (Telephone Number Ely 2072). Resident Partner, Norman Russell, A.R.I.B.A.

#### CHANGE OF ADDRESS

Mr. Reginald W. Brown, A.R.I.B.A., has changed his address from 2a, Town Hall Street, to Norwich Union Chambers, 31, Osborne Street, Grimsby, Lincs (Tel. Grimsby 2909), to which all communications should now be directed.

#### CORRESPONDENCE

#### Beam. Testing

To the Editor of A. & B. N. Sir,—Should Mr. Bestwick continue to search for his "staff of architecture, Beauty" and ignore the architectural staff of his school, then it is to be feared that he will not himself alleviate the plight of contemporary architecture, which he laments so lyrically.

Beauty, as an abstraction will ever elude, and it is only through a knowledge of functions, quality of materials and structural forms that beauty has ever arisen. And, be it noted, accuracy is not the criterion, but an imaginative

grasp of general principles.

The substance of the sketch design thus vindicated—and although Mr. Bestwick with his approach prefers the poetic "Beam Scheme," the prosaic "One Day Sketch Design" is the only truthful description-it remains necessary to add that the degree of participation to this, and the more recent sketch design on columns, showed that enthusiasm which, Gropius and others, hold to be the prime aim of the teacher. I am, etc.

PAUL RITTER.

To the Editor of A. & B. N. Sir,—Being interested in all kinds of visual aids to assist the teaching and learning of Structural Theory I feel the letter by your correspondent Mr.

Bestwick needs a reply.

It is just because of the "natural bent" of architects that model demonstrations of this nature should be regarded as vital. Are not these "technical things" the stuff architecture is made of? The architect's comprehension should be visual and should we not, therefore, welcome any way which brings these structural happenings home to us by means other than abstract, non-visual mathematics?

Perhaps one reason why to-day architecture is in so many cases "graceless, plain, insensitive" is due not to an overemphasis of "science" but to a

lack of visual ability! I am, etc.,

H. WERNER ROSENTHAL.

#### COMING EVENTS

Royal Academy.

May 2. Royal Academy Summer Exhibition, 1953.

Royal Institute of British Architects.

May 5 at 6 p.m. Annual General Meeting, at 66, Portland Place, W.1.

The Modular Society.

May 7 at 7.30 p.m. General Discussion on Modular Co-ordination, at the Royal Society of Arts, John Adam Street, Adelphi, W.C.2.

Town Planning Institute.

May 8-10. Annual Country Meeting at Brighton.

#### ARCHITECT'S WILL

The late Mr. John Murray, F.R.I.B.A., of Edinburgh, left £8,618.

#### IN PARLIAMEN

#### Coal in the Valley

A proposal to begin opencast coal working in the Amber Valley, Derbyshire, was the subject of protests to the Minister of Fuel and Power by local M.P.s, Mr. Henry White (Derbyshire, North-East) and Mr. Oliver (Ilkeston). Mr. White asked the Minister if he was aware of the resentment caused by the proposed requisitioning of land for opencast mining in this beauty spot, and for an assurance that it would not be taken. Mr. Oliver referred to widespread opposition to the project, and asked that opencast working should be discontinued in places of historic interest and natural beauty. Mr. Lloyd stated that a proposal from the National Coal Board for the working of about 60,000 tons of coal in the Amber Valley had recently been received, and forwarded to other Government departments and authorities concerned. Until he had their views he would not be in a position to conwhether working would justified. But he was insistent that coal supplies were such that it was imperative to maintain opencast production at as high a level as possible. (April 20.)

#### Softwood Assessments

Mr. Hurd asked the Minister of Materials if he had made an estimate of the increase of consumption of softwood timber that would follow the abolition of the licensing system; and what was his estimate of the probable saving of substitute materials, such as steel, aluminium, fibre board and cement. Sir Arthur Salter said that he understood various estimates had in the past been made, by both the Government and the timber trade, of the possible increase in softwood consumption and of the reduction in the use of other materials which might result from the abolition of the softwood licensing system. He had discussed this matter with representatives of the Timber Development Association, in consultation with whom officials of the Ministry were now working on a fresh assessment in the light of to-day's conditions and timber prices.

Mr. Hurd asked whether the point had been reached at which softwood so plentiful and comparatively economical in use that it would pay the country to do away with the strict rationing of softwood and make economies in aluminium and other more costly substitutes. Sir Arthur Salter said there was no shortage of softwood, but this country imported about 95 per cent of the softwood it As at present advised, he did not think we could afford the extra expenditure in foreign exchange that would result from complete abolition.

Lady Tweedsmuir added a footnote to another question on softwood consumption in relation to windblown timber by asking if the Minister had recommended that all house floors in Scotland should be made of timber, and not cement. Sir Arthur Salter said that he had not. The permission to use softwood for floors in houses, which could not be restricted to one part of the country, would endanger balance-of-payments factors. (April 20.)

#### Record too Low

Air Commodore Harvey asked the Minister of Works if he was aware that construction on public services and housing in Macclesfield was being brought to a standstill owing to shortage of cement; and what he was doing to bring in additional supplies. Eccles admitted that some work in Macclesfield had slowed down because even the record deliveries of cement to the North-West Region could not keep pace with the demand. Additional supplies would shortly be available for this area. (April 21.)

#### Law Report

In a libel action brought by Messrs. John Hall and Co. (Warminster), Ltd., against Mr. Frank Bowden, A.R.I.B.A., County Architect, Wiltshire, and the Wiltshire County Council, judgment was given for the defendants.

The plaintiffs complained of a letter in July, 1949, written to a Winterslow builder who had asked if the county architect would agree to the use of their paints on a contract. The county architect's letter said: "I am unable to approve . . . I prefer the use of the products of the Walpamur Company and am prepared to consider those of any other well-known manufacturer.

The plaintiffs claimed damages and sought an injunction. The defendants denied that the letter was defamatory, and pleaded that it was written without malice on an occasion of qualified privilege. The plaintiffs alleged express malice against both defendants.

Mr. Justice Finnemore said that Mr. Bowden was entitled to express his opinion on what paints he wanted to use, and that there was no evidence of malice to go to the jury. He could not see that the letter was any reflection on the plaintiffs. No one had said that anything was wrong with the plaintiffs as manufacturers or with their goods. Mr. Bowden was doing no more than expressing a preference for paint other than those of the plaintiffs, and had acted in a way he was entitled to do as county architect. In his view of the law there was no case to go to the jury.

#### R.I.B.A. Examinations

The Examination in Professional Practice and Practical Experience was held in London and Edinburgh on April 13 and 14, 1953.

Of the 224 candidates examined, 189 passed and 35 were relegated.

#### Initial and Wear and Tear Allowances

THE introduction of the initial allowance for machinery and plant, at the rate 20 per cent will be welcomed by all persons engaged in a trade, business or profession. casion accordingly is opportune for considering the nature of this relief in conjunction with relief in the shape of wear and tear allowances.

While the rate of the initial allowance is fixed at 20 per cent for plant and machinery, the rate of the wear and tear allowance will vary according to the nature of the particular plant

and machinery concerned.

Let us for our present purpose take as an example something which is likely to be common to all classes of trades, businesses and professions, i.e., a motor vehicle which is purchased for use in the particular trade, business or profession.

The initial allowance came into operation on April 15, 1953, so that a purchase made on or after that date would rank for the initial allowance of 20 per cent. The allowance will apply, and at the full rate of 20 per cent whether the article is purchased

new or second-hand.

If therefore a motor vehicle, whether new or second-hand, is now purchased, for say £1,000, 20 per cent or one fifth, i.e., £200 can be claimed as an initial allowance. A wear and tear allowance also can be claimed in each year at the rate probably of 25 per cent.

Therefore for the first year it seems, there would be an initial allowance of 20 per cent plus a wear and tear allowance of 25 per cent - 45 per cent in all.

Accordingly for the first year, £450 could be claimed by way of these reliefs leaving a balance of £650 as the written down value of the vehicle for the second year, in which again 25 per cent, based on the written down value of £650, i.e., £162 10s could be claimed as a wear and tear allowance. For the third year accordingly the written down value of the vehicle would be £650 - £162 10s - £487 10s, and 25 per cent of this figure could be claimed as the wear and tear allowance for that year and so on.

But now let us suppose that the vehicle is sold, and that the price obtained is in excess of the written down value after the initial allowance plus wear and tear allowances have

been granted.

For this purpose let us take another Suppose that after three illustration. years, £500 had been allowed by way of these allowances and that the vehicle, which originally cost £1,000, is resold for £600. In such a case the written down value after the allow-ances of £500 would be £500 (£1,000

£500 = £500). As the vehicle was sold for £100 more than the written down value of £500 the taxpaver would be liable to have this excess of £100 taken into account in his assessment for tax. He would in other words

be liable to an assessment of £100 by way of what is called a balancing

charge.

But now if instead in the same circumstances, he had received £400 on the resale, viz. £100 less than the written down value, he could claim relief in respect of this £100, by way of what is called a balancing allowance.

Originally, balancing charges and balancing allowances would arise only when the article was sold or destroyed while the trade, business or profession

was continuing.

This could work out equally to the disadvantage of the taxpayer or of the Revenue according as to whether a balancing allowance or a balancing

charge would have arisen.

Thus if there was a discontinuence of the trade, business or profession, and after the date of such discontinuance the article was sold for example, then if the price on resale was less than the written down value, the balancing allowance in respect of the difference could not be claimed on behalf of the taxpayer. Conversely, if it was sold for more than the written down value, the Revenue could not claim a balancing charge.

Another way in which the taxpayer could benefit would be by giving the article away or taking it out of the trade, business or profession.

Thus if a car was bought for £1,000, and after £600 had been allowed by way of initial and wear and tear allowances, the car was given away free or appropriated solely for private purposes, e.g., by a director or other member of the firm, the Revenue could not claim a balancing charge, and that too, even although the market value of the vehicle at the time of its withdrawal from the business in this way, was in excess of its written down value.

These loopholes, however, were closed by the Finance Act, 1952, and now in all cases, a balancing charge or a balancing allowance, as the case may be, will be made, the article being priced at whatever was its true market value at the date in question, i.e., the date of the discontinuance of the business, where the article is still retained at such date, or the date when it is taken out of the trade, business or profession by its being given away, or appropriated solely to private use.

#### Modern Housing Construction

An ordinary general meeting of The Royal Institution of Chartered Sur-Royal Institution of Chartered Surveyors was held on Monday, April 13, when Mr. R. W. Wates, J.P., gave an address on "Modern Housing Construction," illustrated by lantern slides.

The meeting was presided over by the President of the Society, Mr. John

Cassels Pinkerton, M.C.

Mr. Wates, as head of a large and successful building firm, spoke with authority, and it is to be regretted that

he did not have very much to say about reducing costs in modern house construction. During his survey of postwar housing, Mr. Wates said:

. . it is interesting to notice that prefabrication, as opposed to nontraditional, has made surprisingly little progress in the sphere of permanent housing. The Portal type bungalow was at one time thought to be the forerunner of a prefabricated era in building, but hopes diminished when the implications of cost became a real factor. This cost angle has proved to be the stumbling block in America and prefabrication is a quite negligible influence there also.

"Disappointing as this might be, it is even more regrettable that in none of successful non-traditional houses has there been any noticeable development of alternative methods of constructing the internal parts of a house. There are, of course, some examples in the way of chimney stack construction and there are one or two alternatives for partitions, but in general the difficulty has been that of finding alternative materials which compete in cost with the conventional. Had timber been more abundant, for instance, it would have been possible to develop a number of methods of dry wall con-struction for partitions. Undoubtedly internal construction is the most important object to which future efforts can usefully be directed."

It is to be regretted that shortage of time made Mr. Wates cut short his paper. He compared costs of to-day with those after World War One and mentioned that the removing of controls in 1921 brought about twenty-five per cent drop in prices. He

then said: -

"We cannot envisage such an abnormal drop occurring in these days and it is urgent therefore that the battle against high cost be waged relentlessly. The first attack must come from those who initiate and design the work. At the same time, there must be much greater collaboration between designers and builders. This aspect must encouraged to the limit. Where it has occurred in the past, results have frequently been remarkably good.'

And finally:

"If, therefore, we can honestly recognize improvement in such times of difficulty, now that conditions are looking better, we are justified in having high hopes for the future. If, in the better times to come, the industry can produce the same or a higher skill and ingenuity as it has in the past eight years, then I think we can look for really substantial advances. There is certainly no room for complacency and the scope is wide. The present standards of space comfort and equipment, though good, are capable of much improvement. The industry is not backward and will be eager to seize whatever opportunities that can be developed. It is in this direction that we on the practical side will be looking to the Royal Institution for the able help its members can give us."

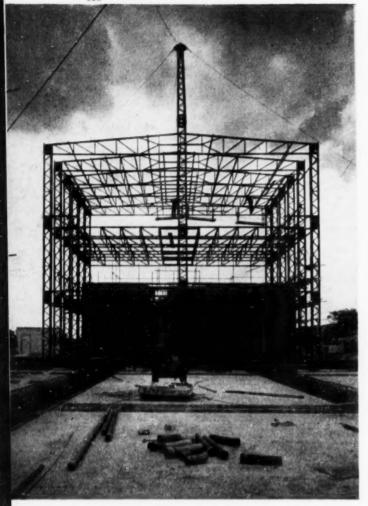
# A FLEXIBLE PLAN The Construction & Cladding

architect: E.D. JEFFERISS MATHEWS, O.B.E., in collaboration with the Engineering

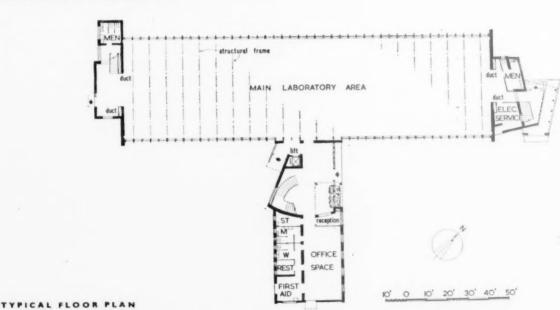
NDUSTRY and research have in recent years found, even more acutely than in, for example, the sphere of education, the need for a very great deal of flexibility, in the internal arrangements of their buildings. To provide this flexibility, in multi-storey buildings where a high quality of finish is required, presents new and interesting design problems. The requirements of research laboratories, where the rapid development of the research call for constantly changing room sizes and equipment arrangement, is an example of this type of building. The internal planning to meet the need of research to-day is out of date to-morrow, as developments call for different arrangements of rooms and equipment.

To meet this need the Engineering Department of the Plastics Division of Imperial Chemical Industries Limited, in collaboration with their chemists and physicists, have worked on the development of laboratory benching and the services to and from the benching, which will permit complete interchange of the different kinds of benches and their re-arrangement within the floor space, rapidly and with the minimum of disturbance. The results of this work have been put into trial use and have become the prototype for the basic requirements for the laboratories now under construction at Welwyn Garden City.

The benching has been developed on a 4ft module. The benches are self-contained individual units which can be arranged in any variable combination either against walls, as islands or as peninsulas. The local services to the benches are run independently in the form of upstanding horizontal ducts, the top of which are coincident with top of the



Lattice steel frame of Laboratory block



#### LABORATORY

# of a Research Laboratory for I.C.I. Ltd. Plastics Division at Welwyn Garden City, Herts

R.I.B.A. (J. Douglass Mathews & Partners) Department of I.C.I. Plastics Division

> benches so that having run a "local" service duct, whether against a wall, or free standing, the benching can be placed against it and the connections made. The wastes from the benching drop to the floor. As not only the easy changeability of benches within a laboratory, but the changes of the laboratory space itself was also a requirement, the benching was directly related to a demountable partition unit on the same 4ft module. The choice of the 4ft module arose primarily for economic use of the materials chosen for benching and demountable partitions. It was also a convenient dimension for handling, although when subsequently developed into the structure of the building it presented some problems when related to economic spans in steel and concrete. The demountable partitions are to be "Holoplast," using the maximum manufacturing nominal 4ft panel to relate the partitions to the 4ft module.

> The problem for the design of the building was, in principle, therefore, the accommodation of this benching and partitioning to enable them to be moved freely and rearranged quickly without undue disturbance. The total laboratory floor space required was approximately 25,500 sq ft. In addition, certain ancillary accommodation, lavatories, some office space outside the general laboratory space, first aid and a conference room were required. The block now being built forms one of ultimately four similar blocks. Site conditions, in addition to those of practical convenience in the use and operation of the building, dictated a building of ground floor and two upper storeys. In detail the problem resolved itself into the provision of a clear and uninterrupted floor space with facilities to provide within any 4ft x 4ft floor space on each floor the siting of the bench unit and the partition unit, and to be able to serve the benches with water, compressed air, gas and electricity, and to take from any bench position the wastes (which might contain corrosives) and the extraction of foul air from fume cupboards. Added to these services will be the general ser

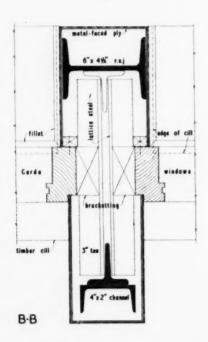
vices for space heating and ventilation, electric light and power, and telephones, all of which have to have the same degree of flexibility to avoid any restrictions on the freedom to move benching and partitions and to change the room arrangements. In order to preserve the uninterrupted floor space, all vertical service runs have had to be designed on the perimeter of the enclosed space. By nature of the class of research carried out, and the required conditions of comfort for the research workers, a high degree of tidiness and quality of finish is required.

An open form of structure, as opposed to the dense structure which is given by concrete or brickwork, has been selected. It is a lightweight structural frame composed of lattice stanchions on the perimeter, deep lattice booms spanning the nominal 48ft of the building and a flat-pitched lattice roof truss. The majority of the steel sections composing the lattice members are of small dimensions, which enabled steel requirements to be met during the peak of the recent shortage by welding up from miscellaneous stocks and re-rolling of railway rails. The steelwork design does in fact show a very considerable saving in tonnage on orthodox construction. The structure is based on a grid of two modules (8ft). This proved to be the most economical dimensions of any multiple of the basic 4ft module. On the perimeter walls the alternate module is available for the vertical services. To provide structural support necessary for floor and ceiling cladding and partition mounting on the 4ft x 4ft modular grid, light skeleton transverse beams running longitudinally and cross-braced laterally on the module line are provided which also serve for the overall horizontal bracing of the structural form so that no steelwork necessary to the structural frame has had to be incorporated to meet cladding requirements. Similarly, the bracing in the vertical plane on the perimeter walls serves also to provide fixings for external cladding and windows. Within this open framework space is there-

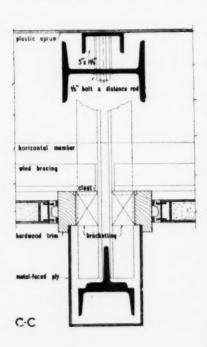
Photograph from South of the building under construction. Administration Wing with Conference Room (right) is linked to the main laboratories by the staircase block.

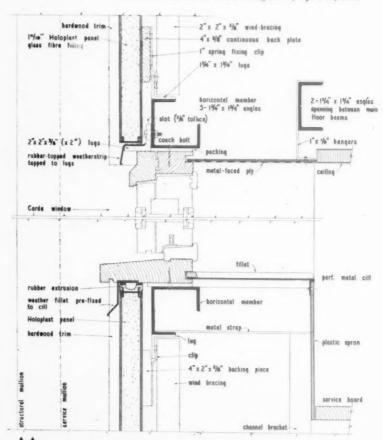


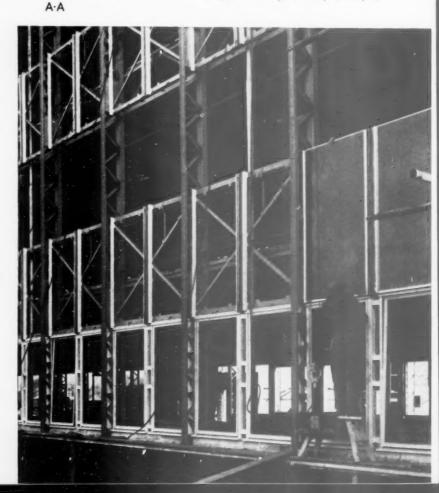
# A FLEXIBLE PLAN LABORATORY

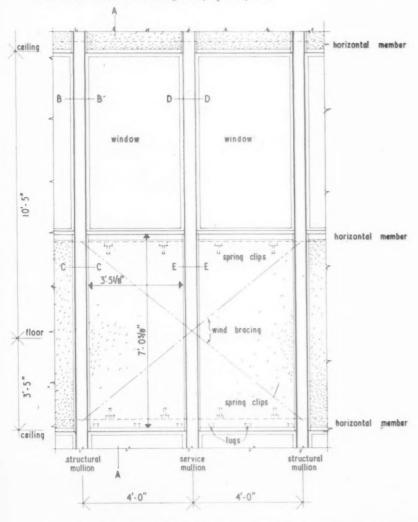


STRUCTURAL MULLIONS Scale & F.S.









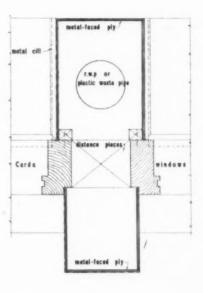
fore available for the services and ducting, whether these are in the floors or along the perimeter walls.

Prefabricated lightweight cladding components are being used for external walls and for floors and ceilings to avoid heavy loading which would defeat the object and economy of the lightweight lattice construction. The external cladding is "Holoplast" thermally insulated panels left in their natural brown colour. The panels are fixed by hooking to structural steelwork and the weathering seal is achieved by rubber extrusions. The panels can be demounted and re-fixed from outside the building so that access to the horizontal services behind can be reached without disturbance inside the laboratories.

The upper floors are pre-cast reinforced foam slag aggregate concrete panels spanning the 4ft module. The service arrangements to and from the benching can be divided into "local" and "main"—the former being above or at floor level, the latter below floor level. To provide space for those at floor level, a similar but inverted floor panel has been designed to provide a trough in the floor slab thickness. The screeding of the floors, to provide unification of the panels and a base for the finishing surface, will be the only "wet" construction above ground-floor level. The floors will be finished with P.V.C. floor tiles, and the shallow troughs covered by a laminated-wood panel surfaced with the P.V.C. tiles.

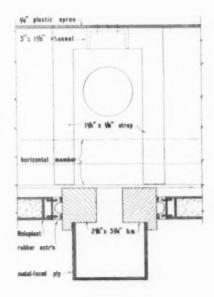
The constant access which will be necessary to the services within the floor space requires an easily demountable ceiling panel. A degree of sound absorption and a resistance against fire is a further requirement. It was found that most ceiling panels failed, for one reason or another, to meet all requirements

PERIMETER WALL
DETAILS
LABORATORY BLOCK

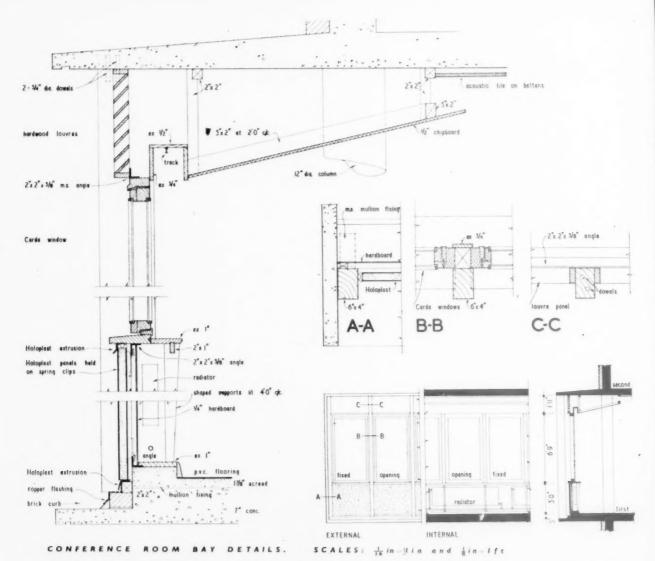


D-D

SERVICE MULLIONS Lth F.S.



E-E



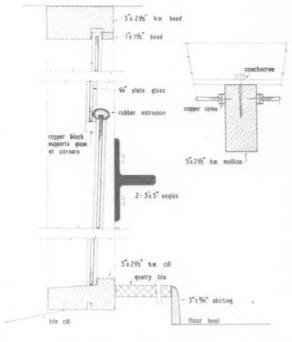
particularly in regard to size and suspension, since any panel less than a normal 4ft × 4ft and requiring continuous edge fixing would have presented difficulties in demounting wall partitions as both ceiling panels and wall partitions must be separate entities to permit either being demounted without disturbance to the other. To meet all these requirements a panel has been evolved composed of compressed cork sandwiched between sheet aluminium, the exposed surface being perforated for sound absorption. It is light in weight and will be hung by a four-point suspension from steel brackets fixed to the structural steel at the intersection of the module lines. These brackets are also used to secure the partitions.

The positioning of the vertical service ducts on the perimeter walls has already been described. Internally and externally these will be encased by metal-faced, waterproofed plywood which form "mullions" between the "Carda" windows. Similar casing is used for the lattice steel stanchions, so that internally an identical "mullion" is provided on every 4ft modular line. Externally some slight expression of the truth in the difference between the "mullions" will be expressed by keeping the service mullions at less projection than the casings to the structural stanchions.

The ancillary accommodation has been designed in the more orthodox construction of weight carrying structural brick walls and reinforced concrete floors since the flexibility requirement did not exist and the "solidity" of this form was considered a desirable contrast to the flexibility expressed in the design of the laboratory block. Within the rigidity of this form of construction some freedom has been designed for the Conference Room as shown by the illustrations.

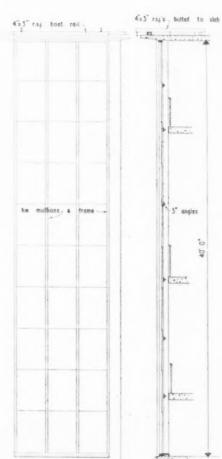
The quantity surveyor was R. E. N. Lowe; A. C. Aston was Consulting Engineer and Messrs. Sommerfields were designers and fabricators of the steel frame.

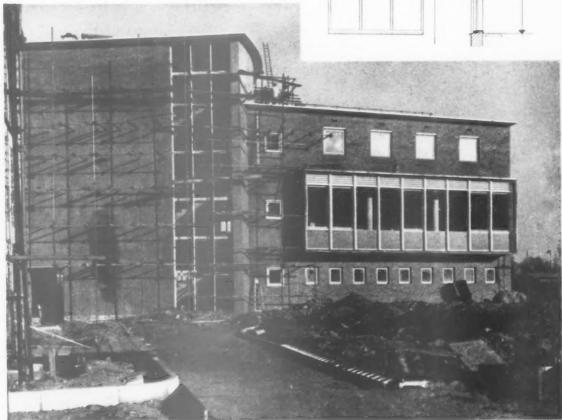
General Contractors: Holland & Hannen and Cubitts, Ltd. Balustrades: E. Coules & Son. "Carda" Windows: Holcon, Ltd. Ceiling Panels: Wm. Mallinson & Sons, Ltd. Electrical Installation: I.C.I. Electrical Department. Heating, Ventilation, Funne Extract and Mechanical Services: Matthew Hall & Co., Ltd. Ironnongery: Pryke & Palmer, Ltd. Laboratory Benching: Norbury Joinery Co. Lift: The London Lift Co. Light Fittings: Troughton & Young, Ltd. Mullion Casings and Duct Covers: Edmonton Panel Co. Paints, Emulsions and Distempers: I.C.I. Paints Division Plastic Door Furniture: Lacrinoid, Ltd. P.V.C., Tiling: Balistic Trading Co., Ltd., De La Rue. Pre-cast Floor Units: Atlas Stone Co., Ltd. Roof Covering: The Standard Flat Roofing Co., Ltd. Sanitary Fittings: Pryke & Palmer, Ltd. Structural Steel: Sommerfelds, Ltd. Terrazzo: Art Pavements & Decorations, Ltd. Wall Panels (external) and Internal Partitions: Holoplast, Ltd.

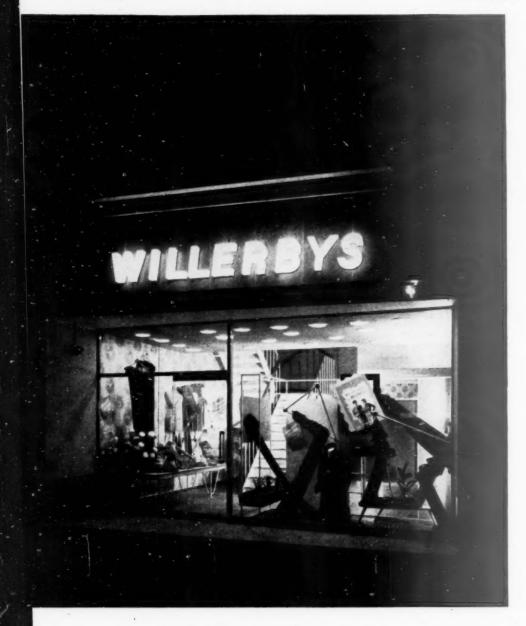


MAIN STAIRCASE WINDOW DETAILS

A FLEXIBLE PLAN LABORATORY







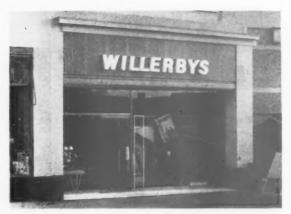
NEW STORE SOUTHAMPTON

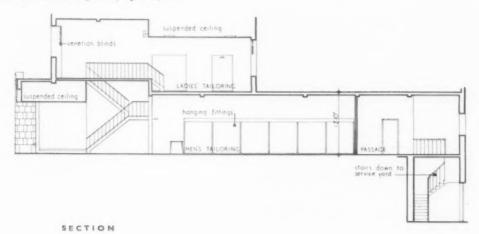
architects:

C. J. EPRIL & ASSOCIATES

assistant in charge:
P. G. MILLAR.

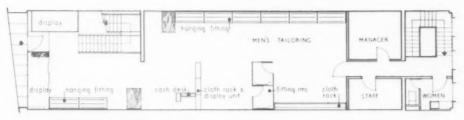
General Contractors: Bovis, Ltd. Acoustic Tiling: Horace W. Cullum, Ltd. Asphalte: Ragusa Asphalte Paving Co., Ltd. Carpets: J. Crossley & Sons, Ltd. Cork Flooring: E. J. Elgood, Ltd. Electrical Installation: Leaf & Carver, Ltd. Electric Light Fittings: Courtney Pope (Electrical), Ltd. Electric Panel Heating: Electric Panels, Ltd. Floor Construction: Phillips Floors, Ltd. Flooring: Semtex, Ltd. Furniture: S. Hille & Co., Ltd. Glass Domes: T. & W. Ide, Ltd. Glazing: Way & Company. Illuminated Fascia Sign: Claude General Neon Lights, Ltd. Metal Windows: Senlac Metal Casements, Ltd. Paint: Duresco Products, Ltd. Shop Fitting and Interior Fittings : J. F. Nott, Ltd. Showroom Staircase: Vipp Engineering Co., Ltd. Stone Facing: The South Western Stone Co., Ltd. Structural Steelwork : Banister, Walton & Co., Ltd. Wall Paper : John Line & Sons, Ltd.







FIRST FLOOR



GROUND FLOOR PLAN

THE new building forms part of the City Development Scheme which is co-ordinated by S. R. Pierce, F.R.I.B.A. The site is the blitzed area north of Bargate known as Above Bar.

The final cost of the complete building, just under £20,000, was lower than the original estimate, due to thorough site organization and careful pre-planning resulting in high individual output by the building operatives on the site.

Bovis were asked to erect a complete store building, to commence early in September and give the client occupation by Christmas, 1952. The store was opened for trading thirteen weeks to the day after the contractor began the first work on the site.

Site work was begun on September 15, when a mechanical excavator was employed to clear debris and soil accumulated in the remains of previous basement buildings. Actual excavation for foundations commenced on September 19: work proceeded rapidly from then onwards following closely to the prepared chart. Completion was achieved by December 13, as planned and the store opened for trading on December 15 to give ten days trading before Christmas.

Despite difficulties of access to the site, the completion day was achieved by detailed planning of every stage of the work beforehand and employing "commando squads" of tradesmen led by team leaders.

Continued overleaf

THE ARCHITECT and Building News, April 30, 1953

NEW STORE SOUTHAMPTON



Woman's Department. The Suspended Ceiling has a covering of acoustic tiles. Wallpaper by John Line.

The main entrance from inside, the Staircase is in welded steel with oak handrail.



Very little overtime was worked, but every man on the site received an incentive bonus.

#### Construction

The design of the building will enable it ultimately to form part of a larger block with a matching stone facade. The structure is steel framed with hollow tile and reinforced concrete floors and roof. Portland stone was used for the front elevation, bricks used were Sand Lime commons and Michlemersh sand faced facing bricks to the rear elevation on the service road.

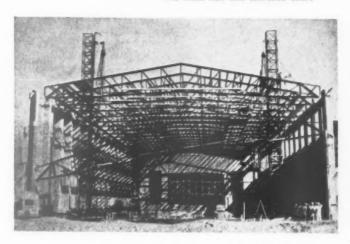
The sales floors are heated by means of electrical heating units incorporated in a cement screed producing an overall even temperature. Floors are covered with cork with the exception of the women's department which has a fitted carpet. Walls and ceiling have been plastered and decorated with emulsion paints. The suspended ceiling is faced with acoustic tiles. Bold use of colour in a contemporary manner has enlivened otherwise plain walls. The staircase is constructed in painted metal with timber treads, perforated metal risers and an oak handrail. The shopfront, designed to give maximum vision into the shop, has a green terrazzo fascia and illuminated name sign of box plastic letters which are simply clipped to the fascia. The steel structure and R.C. foundations were designed by David James-Carrington. The quantity surveyor was S. Lazarus.



The main hall and entrance court

#### AALBORG HALLEN

THE DANISH FESTIVAL HALL IN AALBORG



Under construction

#### architect: Breben Hansen

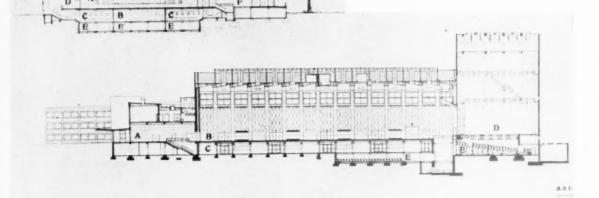
January, 1953.

URING the German occupation of Denmark The hall in its planning to-day is more than an in the second world war, German troops set auditorium. The entire building group with its multifire to the old assembly hall of the Aalborg purpose functions can be regarded as a cultural centre of town. The town council established a public com- considerable magnitude. As carefully as possible the petition before the occupants had left the country. building has been adapted to an adjoining park, with The Aalborg Hall is now reconstructed as the new minimum alterations to the terrain. The big trees of Danish Festival Hall and was opened on the 16th of the entry court combine with the park and the building to convey a unity of concept.

#### AALBORG HALLEN

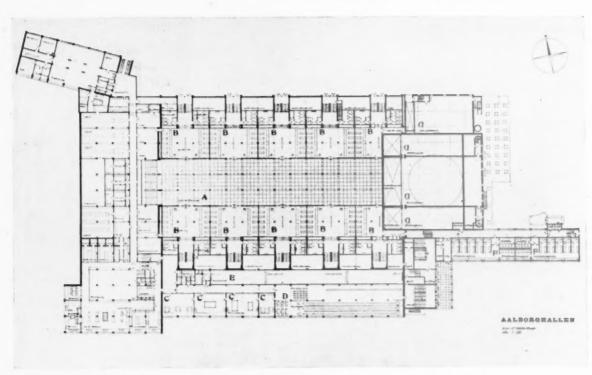
#### CROSS SECTION:

- A. Main hall.
- B. Cloakroom lobby.
- C. Cloakrooms.
- D. Storage. E. Chair unit storage.
- F. Foyer.
- G. Broadcasting studio.



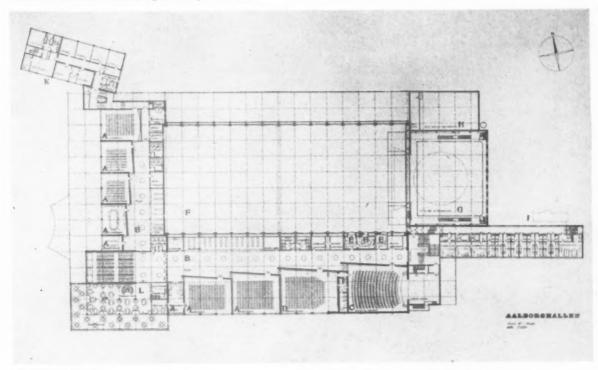
LONG SECTION:

- A. Entrance lobby.
- B. Main hall.
- C. Cloakroom lobby.
- D. Stage. E. Chair unit storage.



BASEMENT:

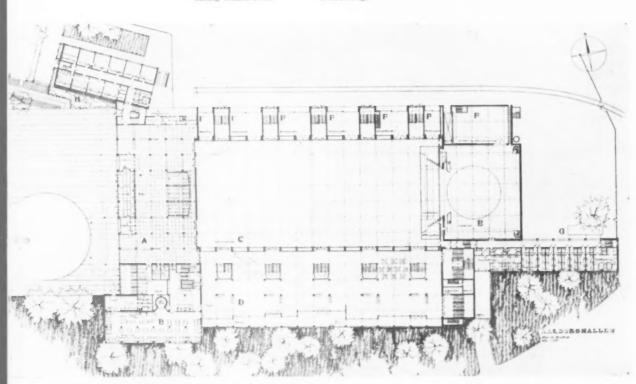
- A. Cloakroom lobby.
- B. Cloakrooms,
- C. Club rooms.
  D. Bowling alley.
- E. Shooting range,
   F. Actors<sup>6</sup> dressing rooms,
   G. Storage,



FIRST FLOOR:

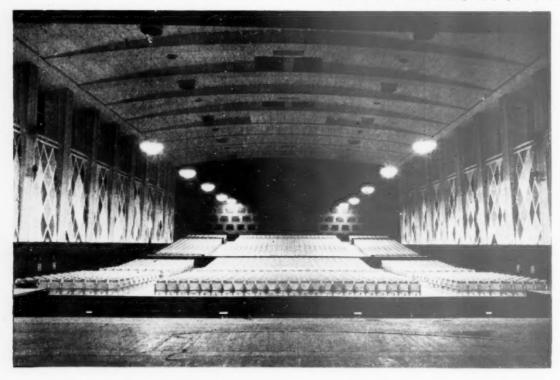
- Assembly room, Foyer, Small theatre, Broadcasting studio, Light sound broad-casting control room.

- F. Upper part of main hall.
  G. Upper part of stage (scenery loft).
  H. Upper part of storage room for stage.
- Dressing room and hotel wing.
   Administration wing.
   Restaurant.



GROUND FLOOR:

- D. Foyer. E. Stage. F. Stores.
- G. Dressing room hotel
- H. Administration.



AALBORG HALLEN

The main hall seen from the centre of the revolving stage, and below, looking towards the proscenium.



Continued from page 517]

Visitors enter through a main lobby which includes an information booth, public telephones, chocolateand tobacco-stands and the booking office. Cloak rooms are located in the basement. From the lobby one can enter the hall directly or reach the cloak-room lobby via a 43ft-wide stairway paved with granite steps. The floor is concrete squares and the whole treatment intends to give the visitor the feeling that he is still in the street and traffic. The wall material is light-blue porcelain enamel tiles, and the ceiling is covered with acoustic panels with clear plastic stain. The concretecolumns are white while the rear wall is kept in light grey with deep green parts. Freestanding informationand bulletin-boards carry time tables for any public transportation-bus, tram, boat or plane-leading to and from Aalborg and any kind of public information.

The Aalborg Hall occupies an area of 86,100 sq ft. The total length of the building is 525 ft and its maximum height 98 ft. The main hall is 236 ft long, 105 ft wide and 46 ft high. A sound insulated movable partition can divide the main hall for two separate concurrent functions. The steel framed partition consists of two separate walls each 1 ft thick, suspended from overhead trolleys running the length of the hall.

Three thousand four hundred seats can be arranged for meetings, 1,796 seats for concerts and 1,381 seats for theatrical performances. Concert and theatre seats are upholstered and arranged on a sloping floor, which is rolled into the main hall in 15 parts, which results in an amphi-theatrical arrangement of the chairs. The large mobile units, each capable of seating up to 125 people, reach their position running on rails lengthwise of the floor. The entire seating can be cleared away in less than 2 hours. The chairs are an industrial product made in plywood by "Bramminge Stolefabrik" in Jylland, back and seat upholstered with the excellent "Tygan" plastic fabric, in black and white "Pepita-pattern," imported from Fothergill & Harvey, Manchester. Each platform is made up of steel frames mounted on ballbearing wheels. Rear seats are raised 12ft. above floor level, so that all seats have good sight-lines for plays, circus-performances, etc. Tee rails guide the units from storage under the stage to proper positions in the hall. One unit can be pushed by one or two men.

The main foyer is 236ft by 82ft. Its south wall is entirely glass, and opens on to a large balcony overlooking the park. The foyer is occasionally used as a supplementary space for exhibitions, etc.

The stage of the main assembly hall has a revolving stage and scenery loft, and has the exact dimensions to accommodate the Danish Royal Theatre and guest performances of international size. The proscenium arch is 46ft wide and can be narrowed by movable sideframes which also act as support for spotlights.

The dressing room wing is connected to the stage. When the wing is not occupied by artists and performers it provides overnight shelter for participants in congresses,

etc., or is run as a hotel for tourists during the summer season.

On the first floor of the main building there are four secondary rooms facing south. The largest of these contains a stage and a projection room, ideal for amateur performances, club-revues, and chamber music. Seating 272 people it is called "The Intimate Theatre." Each remaining room accommodates from 175 to 250 persons, and can be used for meetings, study-groups, dancing, etc.

"The Intimate Theatre" and the largest of the remaining rooms are equipped for broadcasting in collaboration with The Danish Broadcasting System. Broadcasting equipment and control rooms are located between the first floor foyer and the upper part of the main hall. These rooms have sound insulated observation windows overlooking performances and broadcasts. The control room for the main assembly hall is the heart



The grand staircase down to the cloak-room foyer. Below is the ground-floor restaurant.



of the building complex and governs the operations of the movable partition, lighting, black-out curtains, loudspeaking-systems and tape recording, etc.

Another group of small meeting rooms, ranging from 20 to 150 seats per room, is located on the west side of the first floor above the main entrance. All meeting rooms on the first floor have cloak-rooms and toilets nearby. There is a convenient connection to the restaurant which is located on the south-west corner of the structure. This restaurant occupies 2 floors, overlooks the entry court and has outdoor access directly from street level.

The hall's kitchen can serve dinner for 2,200 guests in the main hall. Located in the basement are facilities for Denmark's first bowling-alley, also a skittle-alley, table tennis, billiards and a shooting range.

At the entrance court facing Vesterbro, the main street, the biggest and most beautiful trees have been preserved. A hair-pin curve allows cars and taxies to unload passengers under the canopy made in prestressed concrete. Pedestrians cross the court safe from traffic and reach the main entrance in the middle. The entrance court being a public area has seats under the trees and is an attractive spot for a short rest in the shade on hot days.

The outer wall of the staircase block provides space for announcements about present and future performances and connected to it is the administration wing with administration offices, 2 flats for inspectors and rooms for public service, one of which is a children's rhythmicmusic school "competing with" the concerts in the main hall. To the north is a service court, handling freight from a railway siding to a loading dock and thence to storerooms. Here parking is provided.

The building group is central heated by 5 oil-burners and smoke is removed by a steel chimney rising above the stage tower.

The main hall, stage and cloakrooms are ventilated and warmed by pre-heated fresh air. The foyer, the entry hall, the small meeting rooms and the restaurant are heated by a combined radiator and warm-air system. In all there are 45 heating and ventilating units which maintain an even level of temperature throughout the entire structure.

The lighting of the building is for multipurpose use. The main hall, entry hall and foyer have remote control from 4 key-stations in the building, directed as necessary from the control board. Lamps in the main hall can be lifted to accommodate the movable partitions, which are stored in the space above the ceiling and raised and lowered electrically by remote control. The lamp height is also varied to give different effects such as high light for theatrical use and low light for more intimate lighting at dinners, etc. In addition to general lighting of the hall, and lighting of the coloured walls, extra fixtures are provided for special purposes. Standard fixtures are utilized, but carefully chosen for their purpose to give a festive atmosphere. In the foyer for example, large numbers of simple globe lamps achieve a warm effect through use of low wattage bulbs. Above the staircases are grape-like clusters of globes and beside the window wall a twinkling milky-way.

#### AALBORG HALLEN

First floor foyer



#### Electronic Concrete Tester for Site Use

THE "S.G." water-cement ratiometer, it is claimed enables, for the first time, concrete quality to be routine-tested by semi-skilled labour at the mixer.

The water-cement ratio is the fundamental factor controlling concrete strength. Until now it has been impossible to measure it swiftly and accurately as a matter of routine at the mixer.

After five years of research, followed by many months' industrial testing, the Civil Engineering Laboratories at Sunbury-on-Thames have produced a water-cement ratiometer for testing concrete during its actual mixing.

The ratiometer is compact and portable, and the two parts together weigh only 24 lb; a semi-skilled workman can be taught to use it in an hour. Actual testing operations take less than a minute.

Previously devised testing methods provide only a rough guide to quality or involve the use of skilled technicians. If the testing has to be done on the site, a mobile laboratory has been necessary, and so considerable time elapses before the results are known.

The "S.G." ratiometer, by making merely one simple electrical measurement, is, in comparison, instantaneous in operation.

The instrument is in two parts: a prodder, or canister, at the end of a tubular handle, and an instrument case housing the electrical circuits, control panel and batteries.

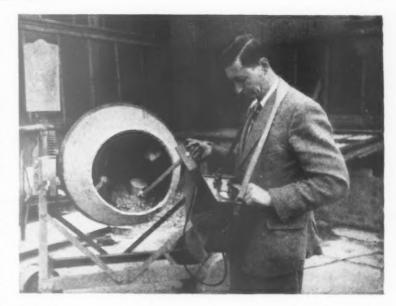
On the base of the prodder are two electrodes near together; inside is housed a small vibration unit.

On the control panel is a dial with a scale divided into "Too Wet," "O.K." and "Too Dry" zones, a switch with "Off," "Calibration" and "Test" positions, an "Adjust" knob and a rheostat with a 0 to 100 scale of Code Numbers. The batteries are housed in the base of the case and a multiple, shock-free, female plug attached to a length of cable is inserted into the plug-hole in the side of the case to connect the prodder. When the lid is opened a warning light indicates that the prodder is in circuit.

#### (1) In Use as a Comparator

The prodder is partially immersed in the concrete after switching on. The vibrator causes the cement, water and any fine particles of aggregate to separate out into a slurry round the electrodes. The prodder is withdrawn until the base is on the surface of the concrete.

The slurry is composed of cement and water in their true ratio. The value of the current passing be-



The S.G. Water-Cement Ratiometer testing concrete during production at the mixer.

tween the electrodes through the slurry is a measure of the amount of water present. This current is indicated on the dial as denoting the condition of the slurry.

In practice a batch of concrete of precisely the water-cement ratio stipulated by the designer is made from the materials to be used on the site.

The adjusting knob, with the prodder in air, is turned until the dial's pointer registers zero. Discrepancies due to the charge condition of the battery are thus eliminated. The switch is turned to "Calibrate" and, with the prodder immersed in the mix, the "Code Number" knob is turned until the pointer remains steady at the centre of the "O.K." zone.

The Code Number thus obtained is noted. On the site, the prodder is immersed, etc., in the mix in the mixer. The switch is turned to "Test," and the "Code Number" knob turned to the already ascertained Code Number. The condition of the mix will be indicated by the zone in which the dial's pointer comes to rest. The requisite materials may then be added to eventually bring the mix to "O.K."

#### (2) In Use To Determine the Actual Water-Cement Ratio of a Mix

A number of mixes with similar aggregate proportions, but with differing water-cement ratios are made. The Code Number for each mix is determined. A graph is plotted between the Code Numbers and the Water-Cement Ratios.

To determine the water-cement ratio of a mix, the prodder is immersed accordingly and the "Code Number" knob adjusted until the dial's pointer rests at the centre of the "O.K." zone.

By reading off the graph already obtained for this proportion of aggregates, the actual water-cement ratio corresponding to the Code Number is obtained. This is the value for the mix.

#### Results of B.R.S. Test

The Report of Special Investigation, No. 1498 of the Building Research Station of the Department of Scientific and Industrial Research, states:—

"The object of the tests was to evaluate the suitability of the instrument for indicating if the water-cement ratio of a sample of concrete is equal to, or is greater or less than, a predetermined figure. The tests showed that within certain ranges of water-cement ratio, the instrument compares correctly with the water-cement ratio in a sample of concrete, with that in a made-up sample of known water-cement ratio when the difference is 0.05 or more.

"The tests also showed that for a 1:1:2 mix the extent of the "O.K." zone on the instrument corresponds to a difference of water-cement ratio of from 0.04 to 0.08, depending on the water-cement ratio of the tested concrete."

All exposed metal parts are fabricated in corrosion-resisting light alloy. The apparatus is fully protected against accidental shortage across the electrodes when testing reinforced concrete in situ.

A broad leather strap enables the operator to hang the box comfortably in front of him, leaving both hands free for operating.

The simple maintenance required is the occasional recharging of the batteries and the wiping of the electrodes after use.

## Blocks of Flats of Three Storeys in Cornish Unit Construction at Hereford

ON Thursday, October 23, last year, the Right Worshipful the Mayor of Hereford, Councillor A. E. Farr, J.P., opened the first block of three-storeyed flats, built for the City Corporation, in Cornish Unit construction

at Oak Crescent, Hinton.

Of well over 12,000 Cornish Unit dwellings completed since 1946 in England and Wales, Hereford City has had a total of 348, comprising 36 two-bedroomed flats in three-storey blocks, 112 one-bedroomed flats and 148 two-bedroomed flats in two-storeyed blocks, and 52 three-bedroomed houses erected since December, 1949. A further 308 dwellings are at present under construction for this City Council.

This latest development by the architectural staff of Selleck, Nicholls & Co., Ltd., in Cornish Unit construction retains, in scaled-up form, the design the late A. E. Beresford, F.R.I.B.A., produced for the Cornish Unit one- and two-storeyed dwellings (of which more than 10,000 have now been completed). The ground-floor and first-floor walling is of precast concrete "pier and panel" construction, to the Cornish Unit patented de-



tails. As in all other Cornish Unit structures, the walling columns are designed as short struts of storey height fixed between the rigid floor membranes and further stiffened at first-floor level by three substantial courses of bonded concrete components into which the feet of first-floor columns are locked.

The first and second floors are of reinforced concrete slabbing cast in situ supported by precast reinforced concrete joists which lock the binder

courses to the central spine wall and to the floor slab.

The second-floor walling is of mansard construction with special treatment at stair wells.

Two staircases approached by the porches seen in the photograph each serve six flats.

The flats are all of the same plan, having large sitting-rooms, kitchens, two bedrooms, bathroom, separate w.c., with a fuel store near each front door and separate pram stores at rear of the block.

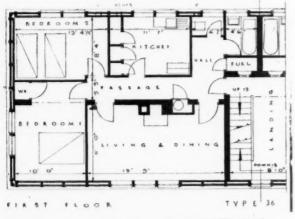
At Hinton, Hereford, the flats are in blocks of 12, but on the Hunderton, Hereford, site the layout called for two blocks of six flats, which are precisely the same in arrangement. The plan of the 2nd floor is similar to 1st floor.

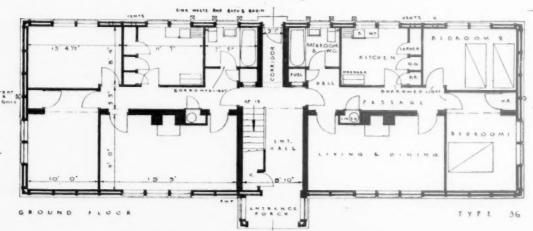
the 2nd floor is similar to 1st floor.
Selleck, Nicholls & Co., Ltd., of St.
Austell, are the main contractors.

The flats were erected by the Hereford branch of Messrs. John Williams & Co. (Cornwall), Ltd. Work was started in June last, and the contract totals 84 flats in 8 three-storey blocks on the two sites.

on the two sites.

Over 150 Local Authorities in England and Wales have included Cornish Unit dwellings in their housing programmes, and the three fighting services all have Cornish Unit married quarters in occupation and under construction.





#### Thermal Insulation

WO official documents on this subject have recently been issued. The first, Ministry of Housing Circular 19/53 with an accompanying Memo-randum on Thermal Insulation of Houses (H.M.S.O., 4d), and the second a reprint from the Housing Centre Review on Heat Insulation for Housing by G. D. Nash, of the B.R.S. The Ministry Circular states, in my opinion very properly, that "the importance of adequate thermal insulation is not so generally understood." It continues by saying that "proper attention to it (thermal insulation) could obviously mean greater comfort for tenants as well as a saving in fuel"; the first part of this statement is very true but, from experience and enquiries, I doubt that the second statement is really correct as occupiers of dwellings tend to use about the same amount of fuel and are, therefore, merely kept warmer. It is probable that the better way of saving fuel is more likely to lie in the installation of improved fuel-burning appliances, even if this adds a little to the basic capital expenditure.

The Ministry Memorandum sets out comparative costs and the associated U-values for various methods of construction which improve the thermal insulation in relation to the cost and U-value of an 11in brick cavity wall. It is most interesting to note that certain of the improved thermal constructions actually save money over the cost of 11in brick cavity construction while for other alternative methods the increased cost per house is very small. It is to be hoped that the U-value of 0.43 given for 9in solid brick walls, which is so poor an insulation compared with even that of the basic 11in cavity wall at 0.30, will at last persuade users to abandon this form of construction which, for other reasons, is often unsatisfactory.

I believe that this Memorandum, as a supplement to the Housing Manual, may persuade more architects to adopt these alternative methods of construction now that they can see more easily the probable differences in cost involved and also if they know that the Ministry is likely to approve small additional costs on this account, most costly of the methods listed is the inner lining of ain plaster board on timber battens, and this method appears to be one which has little advantage in new buildings, although very useful as a method applicable to existing buildings, but it does not give so low a U-value as building the inner leaf of a cavity wall with 4in clinker blocks; the only advantage of this method is the eliminating of plastering, but again this advantage is offset by the vulnerability of plaster-board on battens to accidental damage which is not uncommon on the lowest 3ft of walls of dwellings.

The information given for the thermal insulation treatment of top floor ceilings and roofs should be very helpful to those who, in the past, have taken little interest in endeavouring to reduce this serious source of heat loss, To be able to reduce the U-value at ceiling level from 0.43 to as little as 0.08 for an additional expenditure of about £14 for a pair of semi-detached 850 sq ft houses must seem worthwhile to any housing authority in the interests of the comfort of its tenants.

The article by Mr. Nash on the same subject is a very useful short summary of the advantages of proper thermal insulation. He points out that by better construction without undue increased capital expenditure the total heat loss in a house, having an area of 1,000 sq ft, could be reduced by as much as 35 per cent. He points out, however, that such improvements are likely, in the majority of houses, to raise the comfort in cold weather but it is unlikely that there will be spectacular savings in the domestic fuel consumption, which again bears out views I have expressed above.

Mr. Nash advocates improved constructional methods which follow very closely the recommendations in the Ministry Memorandum. He draws attention, however, to the need for the reduction in the number of air changes per hour within the building which he states as being between two and three in the average house. The Ministry Circular does not mention this source of considerable heat loss and one can only assume that its omission is on account of the greater cost involved of providing an adequate remedy. Mr. Nash states that by weatherstripping or draughtproofing the two external doors of a house will probably alone make a reduction in the rate of loss of half a change per hour.

I do not think that in this country we have taken a sufficient interest in the weatherstripping of the doors and windows in our houses. These are so often a very serious source of air leakage and a cause of draughts; these are due, in part, to the nature of their design but, more particularly, to the poor fit of the doors or the sashes in the frames. I believe we have suffered overlong from these troubles which could be overcome relatively easily although the initial cost is rather high. It seems possible, however, that if weatherstripping was to be introduced more generally at the point of manufacture of windows and doors, it would be much less costly than at present, when it is usually added at some later time. I wonder, therefore, if we have not reached a point where the provision of weatherstripping, in the interest of fuel economy and the comfort of occupiers would be met by making provision in the British Standards for housing types of doors, door frames and windows of alternative types having weather stripping which could be ordered when required; this would be an easy matter for the wooden windows, but how it could be achieved at reasonable cost for metal windows. many in my experience as ill-fitting as wood windows, I do not know. I believe that weatherstripping of wood casement windows of types such as those covered by B.S.644, Part 1, could reduce air infiltration by at least 75 per cent and possibly even more.

There is one small point which must be borne in mind when care is taken to reduce the incoming air from the present normal sources of leakage, namely that provision must be made to ensure that an adequate supply of air is available for the normal burning of fuel appliances; air for fuel-burning purposes is, in my belief, better if introduced at points where it is most needed, e.g., immediately adjoining the fuel appliances. The air changes due to fuel burning can also be greatly reduced by the careful selection of those types of solid fuel appliances which do not require large flue areas and burn their fuel at economic rates, such as closed types of stoves.

Another possible source of considerable heat loss may be due to the tendency in recent years to provide much larger window areas in our houses. As yet it does not seem acceptable on economical grounds to provide double windows in a country such as this which does not have extremely cold weather for several months continuously over winter, nor is double-glazing available at prices which housing authorities are likely to accept. In point of fact I have noticed that the long horizontal windows, as are now fashionable, tend to reduce greatly the wall spacing available against which to stand furniture or to hang pictures, and had it not been for the pressure to reduce ceiling heights to 7ft 6in I believe there might have been an inclination to return to vertical types of windows, not necessarily double-hung sashes, with the window heads placed close to the ceiling in order to increase day lighting of rooms at a greater depth from the window wall.

I am sure that these matters of improved thermal insulation and draught reduction are of such importance that every step should be taken to assist their wider use and, at the same time, to reduce, where necessary, any additional costs involved.

#### DUTCH UNCLE

#### B.S. 233: 1953

The Glossary of Terms used in Illumination and Photometry, which has recently been published by the British Standards Institution, as B.S. 233:1953, is a revision and extension of Sub-section 81 of the Glossary of Terms used in Electrical Engineering (B.S. 205). Copies of this Glossary are obtainable from the British Standards Institution, Sales Branch, 24, Victoria Street, London, 5.W.1. Price 3s 6d.

#### MOSAIGS

#### SERVICES HEATING

B3/39.

The Raydair Heater is a low temperature electric radiator which eliminates wasteful rearward radiation and ensures that all the heat from back and front surfaces is carried forward into the room. It is equipped with thermostat and pilot light. Standard finishes in Peach, Bronze, Penny Bronze and Warm Silver. I kW size. £9 15s.; 1½ kW, £13 17s 6d; 2 kW, £20 5s. Makers: Berry's Electric Ltd., Newman Street, London, W.I.

#### INDUSTRIAL NOTES

● The Ministry of Materials announces that Mr. R. F. Rucker has been appointed Director of Non-Ferrous Metals from May 1 next in succession to Mr. C. A. James who has resigned his appointment as Director as from the end of this month.

Sir Harry Pilkington, Deputy President of the Federation of British Industries and Chairman of Pilkington Brothers, Ltd., was on April 15, at the Annual General Meeting, elected President of the Federa-tion in succession to Sir Archibald Forbes, who retires after helding the Berging who retires after holding the Presidency for two years.

• The Board of Trade announces that all amendments to the Export of Goods (Control) Order, 1952, have now been incorporated in a new consolidation Order.

This Order, the Export of Goods (Control) (Consolidation) Order, 1953 (S.I. 1953, No. 671), comes into operation on April 27, 1953, and can be obtained from H.M. Stationery Office and branches price 1s 6d.

• The President of the Board of Trade announced recently to the House of Commons that Sir Henry Wilson Smith, a director of Vacuum Oil Company, is to be chairman of an independent com-mittee to review the long-term problems of

duty-free entry of machinery into the U.K.

Terms of reference of the committee are to consider and report whether it is in the national interest to provide for the duty-free admission into the U.K. of machinery, either by classes or in individual consignments. The committee will also review the provisions and adwill also review the provisions and ad-ministration of Section 10 of the Finance Act, 1932.

● The British Standards Institution has just issued a standard for tools for soldered socket-spigot joints for lead and lead alloy pipes (B.S. 1958:1953). This type of joint is now being accepted by water authorities and other bodies, as many years' practical experience have shown it to be a satisfactory alternative to the wiped soldered joint. It is intended for straight joints in lead or lead alloy piping and for jointing lead to suitable non-ferrous metals up to 1½in internal diameter. Copies of this standard may be obtained from the British Standards Institution, Sales Branch, 24, Victoria Street, London, S.W.1. Price 2s 6d.

 For several years the Research Department of Jas. Stott & Co. (Engineers), Ltd., Oldham, has been developing a novel form of heat exchange system with a view to improving the efficiencies of the Stott "Junior" and "Senior" water boilers and "Junior" and "Senior" water boilers and café sets. After prolonged tests in actual service, the new form of construction has gone into production and the new Stott equipment gives larger outputs of boiling water with greater economy in gas consumption. Moreover, the prices have been revised to show considerably improved performance for smaller capital outlay. The improved Stott boilers and café sets are fitted with constant pressure governors.

are fitted with constant pressure governors and combustion test figures comply with the appropriate British Standards.

• The advertisement of John Thompson Beacon Windows, Ltd., on page 1 of our issue of April 9 showed a picture of Tancot House, Dar-es-Salaam, Tanganyika, the architects for which are Messrs. Blackburne, Norburn and Partners



#### SERVICES

#### HEATING

holbourn Convection Heater. 20in by 16in by 6in, with 3½in air gap at the bottom. Convected air is provided by cold air entering at the bottom through glass wool filter, passing through elements and discharged at the top at 200° filter in the convergence of th

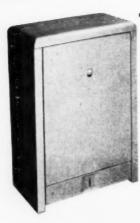


#### SERVICES

#### LIGHTING

B5/21.

Ensur-a-Lite Units: emergency lighting for small halls and Hospital Operating Theatres. The installation includes a battery of 14 cells, type CD.25 and is capable of maintaining an emergency load of 168 watts for three hours. The Edison Swan Electric Co. Ltd., 155 Charing Cross Road, W.C.2.

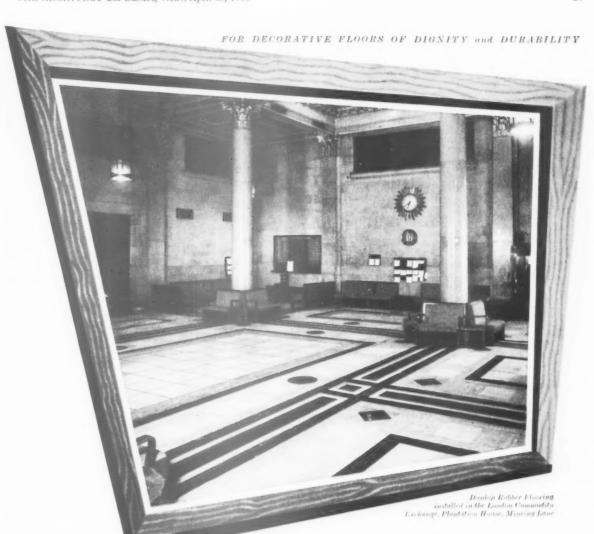


#### SERVICES

#### HEATING

B3/41.

The Thermodare is an electric thermal storage space heater, designed to take electricity at night and store the heat for even distribution throughout 24 hours. It is for industrial use only. I to 1.5 kW according to temperature required. (Average max, surface temp. 160° F.) A detailed specification will be prepared on receipt of full information and plan of building. Two sizes: length 21in. breadth 11in and height 30 and 22in. £12 108 Bd and £11 7a 7d. Finish bronze or cream. Thermodare (Great Britain) Ltd., 36 Victoria Street, S.W.I.



The Semtex Comprehensive Flooring Service also includes SEMASTIC DECORATIVE TILES . VINYL TILES . DESIGNED LINOLEUM . CORK TILES FLEXIMER JOINTLESS FLOORING



INSTALLED BY

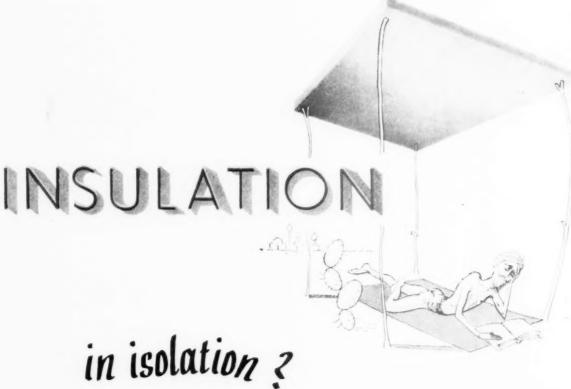
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DUNLOP COMPANY



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to handling; and it will not swell or twist. Behind this combination of qualities lie two things; firstly, Amosite—the uniquely long-fibred asbestos obtained from the Cape Asbestos Co. Ltd's own mines—which makes possible its open cellular structure, obtainable with no other type of asbestos; and, secondly, the special high-pressure steam process by which it is cured. In short, it will be well worth your while to bear "Asbestolux" in mind. May we send you details?

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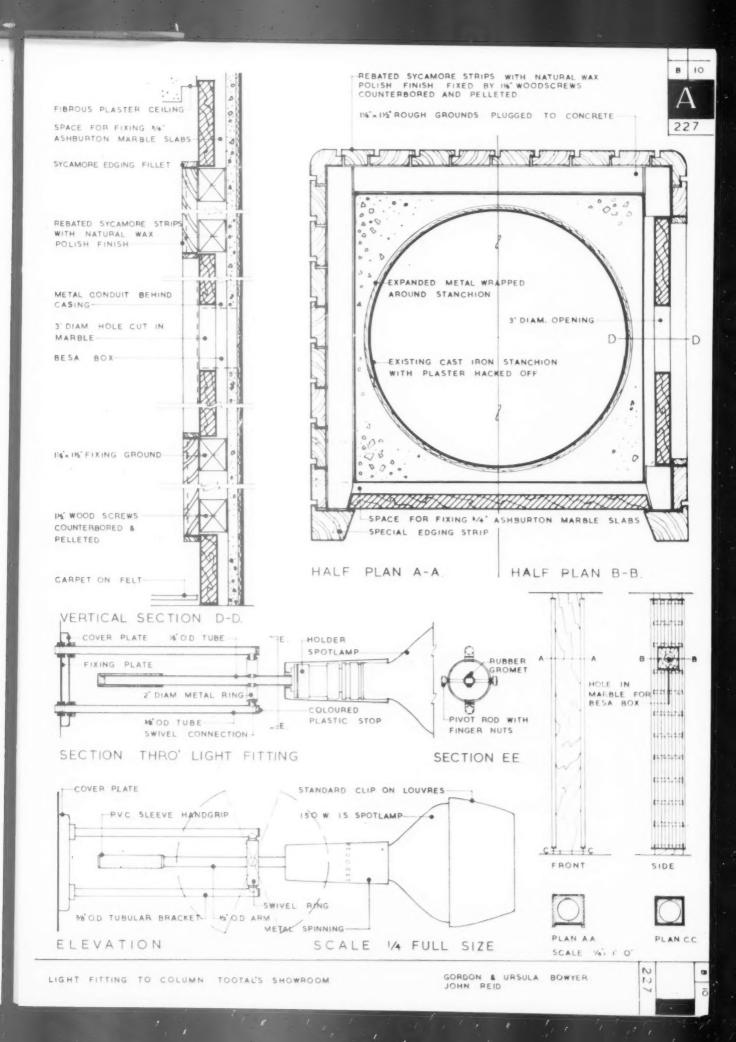
INSULATION

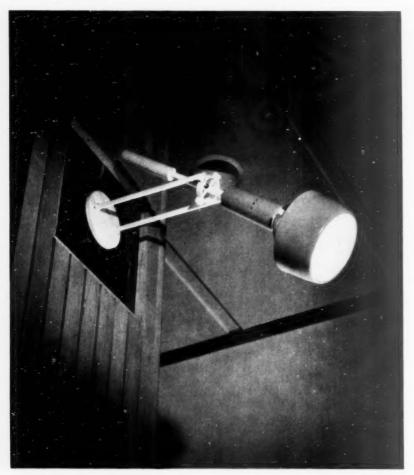
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It had to protect valuable machinery indefinitely against all weathers, and yet be free from maintenance. It had to be quickly erected, light in weight yet strong, rigid yet ductile. It had to

provide high thermal insulation and a clean attractive ceiling.

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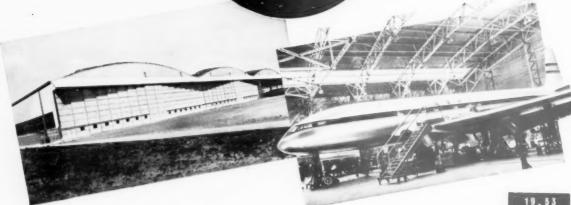
ABERDEEN BEDFORD ROAD

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Building Section

STRUCTURAL & MECHANICAL DEVELOPMENT ENGINEERS LIMITED BUCKINGHAM AVENUE SLOUGH BUCKS TELEPHONE: SLOUGH 23212

CURRENT MEASURED RATES (LONDON)
These apply to new work of normal character and some size. The rates are for time and materials only, and carry 10 per cent in excess, so the appropriate essential on-costs should be added. The basis cost of material used in the calculation of these prices is taken from the foregoing tables which carried up to the 1st of April, 1963.

which carried up to the 1st of April, 1963.	Sectional Lintols and Columns and Braces and
[COPYRIGHT] ESSENTIAL ON-COSTS Fees payable to L.C.C. for District Surveyor: For new buildings of ordinary construction exceeding 5,000 cubic feet, for every 1,000 feet or part of same up to 1,000,000 cubic feet $1/6$ , together with an additional sum of £1/10/- After which allow per 1,000 do	Description   Description
every £100 or part of same, up to £1,000   12/6 per 100 When over £1,000 the sum of £8/2/6, and for £8/2/6 at every £100 or part of same beyond $3/-$   $+3/-$ per 100 Public buildings: Fees as above but plus $50\%$ .   $+50\%$ Fees in respect of means of escape in case of fire are $1/5$ th of the above or £2 if greater or in the case of a one-storey building £1   1/5th Steel framed or r.c. buildings double   $+2$	In floors and beams 68/- 63/- 59/- 53/- In walls
Allowance to cover National Insurances, Holidays with Pay and Public Holidays, Welfare, Third Party Risk, Travelling and Guaranteed Week is made in the rates attached to the items.  Allow for Fire Insurance do	in thickness (scaffold to add)— In 1: 3 cement mortar. Flettons or other similar at 108/- per 1,000 36/- Mild Stocks or do., at 213/- per 1,000 49/- Second Stocks or do., at 244/- per 1,000 52/- Southwater engineering or similar bricks, at 318/- per 1,000 64/- Blue Staffordshire wire cut at 450/- per 1,000 78/-
Supervision, etc. assessment Contract value £4,000 £6,000 £12,000 £24,000 £50,000	Do, if in backing to masonry including cutting
Cost of admin 6% 5% 5% 4½% 4½% Agent or foreman	Do. If circular-on-plan 6/6
(each) 5% 4½% 3½% 2½% 1½% Timekeeper or Watch-	BRICKWORK IN THICKNESS NOT REDUCED—  1 Brick 11" Hollow
man (each) 2½% 2¼% 1½% 1% ½%	Brick, Half- finished with 2"
SPOT ITEMS AND DEMOLITION, ETC.         Per foot run           Hoarding erected and removed         16/-           Planked gangway with handrail, etc. do.         8/6           Proper gantry         do.         64/-           Sleeper roadways         13/6	walls. walls. sides. G.I. tics.  In Flettons or similar 15/6 19/7 36/- 41/6  In second stocks or do 21/1 27/9 52/- 57/6  Add: for pointing as
Needling, strutting and shoring including all labours Per foot cube and use and waste in erection and removal 16/– Breaking up and removing hard masses of concrete Per yard cube or brickwork, etc., found in foundations 54/–	side 1/4 1/4 1/4 1/4
ALTERATION-DEMOLITION—Brick Brick Brick Per yard Cutting out cement concrete or Per foot super Cube brickwork in small quantities 1/2 2/2 3/- 54/- Do. if either in very small quantities or reinforced 1/10 3/6 5/- 80/-	thickness of { brick 60   Per yard Do. all as last but an average total thickness of 1 bricks 66   86   do
Debris into baskets and removed from inside to outside of bldg. 3\(\frac{1}{4}\)d. 6d. 7\(\frac{3}{4}\)d. 11/3	In first quality Stocks at 260/ 31/5 56/4 Per yard In red facings at 280/ 31/6 56/7 super.
SCAFFOLDING Per Yard superficial 1 months 5 months 5 months	In bluepressed facings at $486/6$ $46/4$ 85/11 do.
Putlog type—4' 6" lift 3/8 5/8 7/6 Do. —6' 0" do 2/11 4/6 6/1	Cut tooth and bond new brickwork to old
independent type—4 6 lift 4/10 //9 11/-	Do., as last, but vertical
EXCAVATION Per Yard Cube. By Hand Common Loam Stiff Hard Soil and Clay Clay Gravel	Frames, bed and point in cement mortar, one side 4d. per ft. run Window board of 6" × 6" × ½" rounded on edge quarry tiles, bedded, pointed, cut and fitted 2/9 do.
Reduce levels 4 6 4 7 6 3 7 7 Surface trench 7 10 9 6 12 6 13 4	Terra cotta air bricks built in and $9'' \times 6''$ $9'' \times 9''$ pointed, including flue $4/9$ $8/6$ each.
Barrow 25 yds 2 4 3/1 3/6 2/4 Fill and ram 4/1 4/7 5/- 4/10	Chimney pots, plain red, set and 1ft high 2ft high flaunched in cement mortar 12/3 18/3 each
Load and cart 13/6 13/11 14/5 13/8  By machine	Metal windows, assembled, hoisted Up to 5ft 5ft to 10ft and fixed, lugs cut and pinned super. super.
Bulk dig and load 3/3 3/8 4/- 4/- Lorry standing while loading	and frames bedded and pointed one side in cement mortar 9/6 12/- each
and 5 miles travel to tip 5/2 5/9 7/- 6/5 1 extra mile to tip 7d. 8d. $8\frac{1}{2}$ d. 8d.	10ft to 20ft 20ft to 40ft super. super.
CONCRETE 1½ in Ballast Aggregate Per yard cube 1:3:6 Cement concrete in foundations	Leaving holes through walls for Small pipes Large pipes pipes and afterwards making good 3d, per in 6d, per in
REINFORCED CONCRETE  1:2:4—§in. concrete, worked around reinforcement, between formwork in the following (at various levels):— Foundations and surface beds	in depth in depth Cutting do., and afterwards do $9\frac{1}{2}d$ . do. $1/7$ do.

MEASURED RATES—Continued	Portland cement (1:6) Per yard run concrete bed under drain 4in. 6in. 9in.
BRICKWORK—Continued	pipes and benching up on 18in wide 20in wide 23in wide
FACING— Extra only over common brickwork (108/- per 1,000) for	both sides—6" thick 5/6 6/5 8/-
facing with superior bricks in Flemish bond and pointing as the	SALT GLAZED SANITARY DRAIN PIPES
work proceeds.  Rustic Flettons (133/-) 3/1½ per yard super.	and lay and joint with Yarn and Cement Mortar in trench.
White (190/-) 7/8 do.	Per foot run
White (190/-)	"Best" 2 Tons or more 2/5 3/6 5/9
Reds (280/-) 13/10 do.	over 100 pieces 2/7 3/10 6/3
Blue pressed (497/6) 30/- do.  If built in English bond, Add 10% to above.	"Best Tested" 2 Tons or more 3/- 4/4 7/4
If do. half-brick stretcher bond, Less 25% off above.	"Best Tested" 2 Tons or more 3/- 4/4 7/4 over 100 pieces 3/4 5/- 8/1
COPING— All labour and material in forming brick-on-edge coping with	under 100 ditto 3/5 5/1 8/6
two courses of roofing tiles under and cement weather fillets on	"British Standard" 2 Tons or more 2/7 3/10 6/3 over 100 pieces 2/10 4/1 6/9
both sides, built in cement and pointed as the work proceeds.	under 100 ditta 2/11 4/2 7/1
Per foot run 9" thick 14" thick In picked Flettons 6/- 8/-	"British Standard 2 Tons or more 3/2 4/8 7/9 Tested" over 100 pieces 3/5 5/1 8/6
In first quality Stocks 7/3 10/6	
In red facings	Extra for bends "Best"—Contained in 2 3/9 5/6 15/5
Plumbing angles 2d. per foot run Fair cutting 9½d. do.	Extra for junction "Best"
Fair raking cutting 1/4 do. Fair circular cutting 1/4 do.	-4in on 4in, 6in on ditto. 5/10 8/6 25/1
Fair circular cutting 1/4 do.	6in—9in on 9in)
Fair squint or birdsmouth . 1/7 do.  ARCHES	IRON DRAIN PIPES—
Extra over Fletton brickwork for forming window	Heavy cast iron socketed and laying and Per foot run
head with red facing bricks set on end and with foot run	jointing in molten lead— 4in 6in In main runs
4½" soffits and pointing	In main runs
rubbers set in putty with fine joints 16/-	each
PARTITIONS	Extra over last for bends and extra joint 32/- 54/6  Do. on do, for junctions and extra joint 44/- 78/-
Per yard super— (over 100 Yards) 2in 2½in 3in	Cast iron gulley with 10½in, inlet and 4in out-
Concrete slab partitions in cement mortar 9/2 10/4 11/7	let, composed of hooper and trap, and 9in extension piece and 10½in grating, and
Hollow clay do	jointing all together, and jointing to drain
Cutting and bonding at angles, intersections and ends	and surrounding in concrete 117/
PAVING lin lin lin	Do. rain water shoe with vertical inlet and inspection cover, and joint up and embed 54/- 107/-
Grano trowelled gauged 5:2 7/6 9/- 10/6 yard super	
1×5in skirting, square top and cove bottom 2/6 foot run in x 6in red quarry tile paving 25/6 yard super	MANHOLE SUNDRIES— 4in 6in Salt glazed straight half-round main
\$in × 6in do, skirting	channels each 5/- 7/-
Jointless flooring, in thick 20/- yard super	channels each 5/- 7/- Do. curved do. 10/6 15/-
ASPHALTE (normal conditions and fair quantity) fin pitch mastic floor in B.S.	Do. three-quarter section splayed channel bends (Barrons or similar) do. 13/9 19/10
in pitch mastic floor in one coat on felt underlay	Heavy manhole steps galvanized do. 10/
on prepared concrete base 1450/48 1375/47	Fix only manhole covers do. 8/6 — 4in Mica flap, brass faced, f.a.i. valves
Black Brown Red	and fix with molten lead joint do, 34/- —
Per yard super 11/3 12/6 13/6	DOOFFD
Unit B.S.988 Rock	ROOFER CORRUGATED ASBESTOS SHEETS
§in in two thicknesses on B.S.S. 1162/44	P.C. 5/8 per super yard, including side and
felt underlay on prepared concrete base yard super 14/9 20/-	end laps and fixing to wood 122/- per square  Eaves filler pieces
concrete base yard super 14/9 20/- Ditto in narrow widths foot super 1/10 2/6	Adjustable ridge 3/2 do.
žin skirting 6in high, angle	Barge boards
fillet at bottom splayed and turned in at top foot run 2/2 2/6	4in gauge nailed every 4th course with 1½in
External angles each 5d. 5d.	galvanized nails, to battens (measured
Internal ditto each 8½d. 8½d.  Tanking or Damp Course B.S.1097/43 B.S.1418/47	separately) 197/- do.
Vertical in two thicknesses yard super 19/- 25/-	Extra over last for top edge or abutment cutting 1/- do.  Do. for double course at eaves 1/10 do.
in horizontal ditto yard super 12/9 19/6	Do. for verges, undercloak, bed and point 2/6 do.
Vertical in three thicknesses yard super 24/3 33/- 11 in horizontal ditto yard super 18/8 29/6	Do. Valley tiles including cutting and waste on both sides 9/- do.
Labour rounded external	Do. Bonnet hips and do. bed and point 10/- do.
angle per foot run $4\frac{1}{2}d$ . $4\frac{1}{2}d$ . $Ditto$ internal angle fillet per foot run $8d$ . $8d$ .	Half-round ridge and bed and point 2/6 do.
Ditto double ditto per foot run 1/3 1/3	Fixing soakers 1/3 dozen
Collars to small pipes each 3/- 3/6	Bituminous felt roofing in two layers, laid
Ditto to large pipes each 5/- 6/-	breaking joint and bedded with hot mastic
DRAINAGE Per lineal yard $ \begin{array}{ccccccccccccccccccccccccccccccccccc$	and finished with fine dry grit 8/6 yard  Do. but in one layer only 6/4 super.
Excavate trench, and plank and 3 do 17/2	Per square
strut to sides, consolidate 4 do	WELSH SLATING— 12" × 10" 18" × 10" 20" × 10 3in lap, 2 zinc nails to each slate 242/– 262/– 299/–
bottom to fall, return fill and 5 do	211 mp; & sinc mans to cach state 275 - 205 - 277 -
and load and remove surplus. 7 do 43/10	Additional labours— Per foot lineal —
	At tops, verges and abutments—straight 1/2½ 1/3½ 1/6
In ordinary ground — 8 do	
moderately firm. 9 do 64/6 10 do	Do. —raking . 1/9 1/11 2/3 At hips and valleys (each side) . 1/9 1/11 2/3
moderately firm. 9 do 64/6	Do. —raking 1/9 1/11 2/3



#### A Window in Jamaica

BY JOHN MINTON

Different climates present special problems to the Window maker. Crittall Windows are exported to more than sixty countries; and with them often go such things as sunbreakers, stormsash, shutters, flyscreens and typhoon bars.

#### CRITTALL WINDOWS

THE CRITTALL MANUFACTURING COMPANY LIMITED

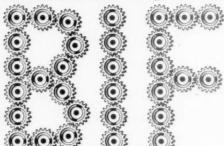
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# 1953 Come to 6 6 6 the Fair

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Big attraction at this year's BIF is a 40,000 sq. ft. "Town" of prefabricated buildings Britain offers for export—school, hospital, houses, etc.—fitted, furnished, and equipped. Wide range of other building trade exhibits at Birmingham.

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Were used in the new Cavendish Primary School, Middlesex, and in 12 schools in the same programme

THERMACOUST Roofing Slabs are being extensively used by leading Local Authorities and Architects, and in many notable school and civic schemes. They have outstanding advantages for roofing schools, factories, housing, shops, etc. THERMACOUST Slabs are large, lightweight, easily handled units, with high heat-insulating properties. They are fire-resistant and can be cut with wood-working tools. Standard slabs, 6ft. long; 6ft. 8in. and 7ft. slabs made to order.

- \* For FLAT or PITCHED Roofs
- \* NO purlins needed at less than 7ft. centres
- NO other insulating material has greater structural strength
- \* NO ceiling essential; high sound absorption it left bare



Cavendish Primary School, Chiswick County Architect: C. G. Stillman, F.R.I.B.A.

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For Information Sheets and prices apply to \_\_THERMACOUST LIMITED, 39 VICTORIA STREET, LONDON, S.W.I. (ABBey 2738)

#### MEASURED RATES—Continued per foot super— \$\frac{1}{210}\$ 1\frac{1}{210}\$ 1\fra

MEASURED RATES—Continued  FLOORS AND FLATS Hollow tile in situ or precast units hoisted, bedded and fixed—Superimposed load—Span—Span—Span—Span—Span—Span—Span—Span	In shelves, table tops, wrot and fixed Do. in divisions and ends framed
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	SUNDRIES—Per foot run Glazing beads, mitred around and fixed with brads
CARPENTER AND JOINER SOFTWOOD CARCASSING— per foot cube— Labour, materials, waste nails, Plates Joists Rafters Trusses hoisting and fixing . 17/8 18/6 20/- 22/-	Fitted ends 2d. do.  STAIRCASE—  1 in Softwood treads with moulded nosings. 1in super
FLOORING	risers tongued both edges and glued, blocked and bracketed on and including two fir framed carriages
SKIRTING— Per foot superficial— ½in ¾in Iin Wrot softwood moulded skirting with grounds and backings plugged . 3/2 3/9 4/3 Mitres to do 3d. per sectional inch. Fitted ends 2d. do.	2in moulded string       4/6         2in do, ramped       10/-         Ends framed to newel       8/6 each         Tongued and mitred angles       4/6 do.         Tongued heading joints       4/6 do.         Ends of treads and risers housed to string       3/- do.         Extra for curtail ends to steps, glued up and veneered riser and solid blocking       90/- do.
SASHES, Fanlights, casements, borrowed lights, etc.— Without With bars	Balusters about 2ft 9in long, square and 1in 11in 11in
Per foot super—  2in softwood rebated, moulded and fixed	framed each end each 3/- 3/6 4/- 3/in × 3/in square newel, framed 3/6 per foot run African mahogany moulded 3in. × 2in. hand- rail. (Joints below)
WINDOWS, hung on lines— Softwood cased frames, I in inner and outer linings, I in pulley siles, 2in sashes, oak sill.  Per foot super.  Window as described 16/- 8/4 6/7 5/3  Add if sashes in squares, about 2 feet super in each — 1/3 1/7 1/6  Extra for hanging sashes with lines, weights and axle pulleys	FIXING ONLY IRONMONGERY         To deal         To hardwood           Barrel bolts         1/6         2/2 each           Flush bolts         3/6         4/3 do.           Sash fasteners         2/-         2/6 do.           Rim locks and furniture         4/9         5/10 do.           Mortice locks and do.         9/6         14/6 do.           Cupboard locks         2/6         3/- do.           Casement fasteners         2/-         2/6 do.           Do. stays         2/-         2/6 do.           Grip handles         2/4         3/- do.
Softwood linings, tongued at angles and tongued to frame including grounds in lin lin lin lin lin and backings 3/2 3/6 4/3 4/8  Add if crosstongued 6d. 6d. 6d. 6d. Softwood wrot rounded on front edge and with tongue at back window	Spring catches       2/-       2/6 do.         Cabin hooks       1/7       2/2 do.         Floor springs including oil       42/-       51/- do.         Overhead springs       11/9       14/- do.         Springhinges       9/6       11/2 do.
board including groove in sill and bearers	SMITH AND FOUNDER Basis framed steel joists and hoist and fix Do, but in compound girders
Per foot run— Softwood wrot and fixed in bearers, backings, grounds, fillets, and	Additional cost per cwt. over basic sections for following R.S.J.s. 9in × 7in . 3½d per cwt. 6in × 3in . 4½d. per cwt. 5in × 3in, 10in × 8in, 12in × 8in, 14in × 8in, 16in × 8in, 18in × 6in, 18in × 7in,
grounds, fillets, and similar $3\frac{1}{6}d$ . $6d$ . $8\frac{1}{6}d$ . $10\frac{1}{2}d$ . $1/1$ $1/3$ Add if in short lengths $2d$ . $2d$ . $2\frac{1}{6}d$ . $2\frac{1}{6}d$ . $3d$ . $3d$ , if plugged to brick-	$20\text{in} \times 6\frac{1}{2}\text{in}, 20\text{in} \times 7\frac{1}{2}\text{in}$ $6\frac{3}{2}d$ . do. $5\text{in} \times 2\frac{1}{2}\text{in}, 22\text{in} \times 7\text{in}$ $10d$ . do
work 4d. 4d. 4d. 4d. 4d. 4d.	4in × 3in, 24in × 7½in
,, if framed as in legs and bearers 3d. 3d. 4d. 4d. 6d. 6d	$3$ in $\times 1$ $\frac{1}{2}$ in $3$ / $10$ $\frac{1}{2}$ do. Bolts and nuts, fitted $140$ / $-$ do. Forged straps $100$ / $-$ do.
or beaded $\frac{1}{4}d$ . $\frac{1}{4}d$ . $\frac{3}{4}d$ . $\frac{3}{4}d$ . $\frac{3}{4}d$ . $\frac{3}{4}d$ . $\frac{3}{4}d$ .	Wrot iron balustrade 124/- do.
,, if moulded in architraves, capping, etc. 3d.  DOOR FRAMES— Per foot run— Per sectional inch— 6in 8in 10in 12in 13in	RAINWATER GOODS— Round cast-iron pipe with socketed joints caulked with red lead and tow and fixing with pipe nails and gas barrel distance 2in 3in 4in
Softwood, wrot, rebated, rounded framed and fixed 1/101 2/3 2/81 2/11 3/15	pieces to plugs in brickwork
DOORS—Per foot super. Number of panels—	Do. junctions do. 7/- 9/- 13/- Do. bends do. 5/6 7/- 9/6
2in. Softwood, square 1 2 3 4 5 6 framed and flat panels,	RAINWATER GUTTERS Per foot run—4in 5in 6in
both sides, on butts 5/- 6/- 6/6 7/- 7/3 8/- 1\frac{1}{2}\text{in do.} 4/2 5/- 5/6 5/10 6/1 6/7  Add for each side moulded 4d. 5d. 6d. 7d. 8d. 9d.	Half round C.I. gutters jointed in red lead and bolted and fixed on iron brackets 3/1 3/9 4/8 Ogee do. All as last
Add for do. flush panelled 8d. 8d. 8d. 6d. 7d. 7d.	Do. angles or outlets 5/- 6/4 7/6

#### MEASURED RATES-Continued

EXTERNAL— 4lb Milled Sheet le	ad per c	Soak wt. 16	ers 1/-	Flats 192/-	Flash 20	nings
Day Contact	11.	21	45.		• • •	0.
Per foot run	in 5/6	in	lin	1 in	lin	2in 21/-
Lead main pipe	5/6	7/6		12/6 10/4	15/8	
Ditto waste ditto	2/10					17/1
Ditto service ditto Ditto waste ditto Bends eac	3/10	4/6	5/10	7/4	9/9	
Solder joints	cn —	0/6	11/2	1/9		7/9
Solder joints ,, Union and joints ,,	7/8	9/6		13/5	15/11	21/2
Stop valve and ditte	12/10		21/1	28/1	-	_
Stop valve and ditto,, Bib valve and ditto ,,	28/11			80/9	_	-
Ball valve and ditto ,,	20/8		49/5.	71/11		_
Sleeve and ditto ,,		-	-	-	21/3	28/9
COPPER TUBES						
· ·	½ in	∄in	1in	1\in	1½in	2in
Tubes per foor run	2/8	3/3	4/5	5/3	6/1	9/-
Couplings: straigh	t					
each	3/-	4/-	6/-		10/1	
Do. Bends each	6/5	7/8	10/11	14/10	22/8	31/4
Do. Tees	6/9	7/10	12/3	16/6	22/10	32/5
Do. Cistern	4/5	6/-	7/10	10/-	13/11	18/7
Do. Tees Do. Cistern Stop cocks	23/1	0 33/6	52/9	93/- 1	38/- 2	213/-
BLACK TUBING	Class C)	in }	in 1ir	ı 11in	1½in	2in
fixed with pipe b	rackets					
Tubes, per foot run		1/9 2	$\frac{1}{2}$	7 3/3	3/10	5/1
Tubes, per foot run Bends and fix, each . Tees and ditto . Fire bends		3/10 4	6 5	6 7/1	8/-	
Tees and ditto .		4/- 4	8 5	8 7/3	8/10	
Fire bends		1/3 1	1/6 1/	7 1/10	0 2/5	4/3
			and tance		4in 6/8 fo 0/9	ot run each do.
						ot run each do. do.
waste fixed with pieces and molten Extra only for bend Do, junctions an Do. cleaning do Domical wire guard				4/6 12/7 2 14/- 2 16/6 1 2/4 2	6/8 fo 0/9 6/- 8/- 2/6	
waste fixed with pieces and molten Bxtra only for bend Do. junctions an Do. cleaning dor Domical wire guard PLASTERER—	nails a lead join ds and joints d joints ors ds	and dist	tance	4/6 12/7 2 14/- 2 16/6 1 2/4 2	6/8 fo 0/9 6/- 8/- 2/6	super
waste fixed with pieces and molten Bxtra only for bend Do. junctions an Do. cleaning dor Domical wire guard PLASTERER—Lime and hair	nails : lead join ds and jo d joints ors ds	and dist	tance	4/6  2/7 2  4/- 2  6/6 1  2/4 2	6/8 fo 0/9 6/- 8/- 2/6 yard	super 5/4
waste fixed with pieces and molten! Extra only for bene Do. junctions an Do. cleaning doc Domical wire guard  PLASTERER— Lime and hair Do.	nails : lead join ds and jo d joints ors ds	and dist	tance	4/6  2/7 2  4/- 2  6/6 1  2/4 2	6/8 fo 0/9 6/- 8/- 2/6 yard	super 5/4 6/9
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waste fixed with pieces and molten   Bxtra only for bend   Do. junctions an   Do. cleaning doc   Domical wire guard   PLASTERER—  Lime and hair   Do.   Sirapite   Do.   Do.   Portland	nails ilead join ds and joints ors ds	Render a Ditto flos Skimmin Render a Render flos	nd set at and set og coat nd set	4/6 12/7 2 14/- 2 16/6 1 2/4 3	6/8 fo 0/9 6/- 8/- 2/6 yard	super . 5/4 . 6/9 . 3/6 . 6/11 . 8/10
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waste fixed with pieces and molten   Bxtra only for bend Do. junctions an Do. cleaning doc Domical wire guard   PLASTERER—Lime and hair Do. Sirapite Do. Do. Portland Do. Do. Ceenes Do. Keenes Dubbing Metal lathing 6" × 6" × ½" Earth country, white and posters white posters	nails lead joint do and joint do and joint sors ds	Render a Ditto floo Skimmin Render a Render floor scr Skimmin face Floor scr Skimmin Thick or mesh × Plain C	nd set at and set loat and set loat and set loat and set loat and set less 24 Gaullazed	4/6   22/7   2   4/- 2   16/6   1   2/4   2   4   4   4   4   4   4   4   4	6/8 fo 0/9 6/- 8/- 2/6 yard:	super . 5/4 . 6/9 . 3/6 . 6/11 . 8/10 . 4/1 . 4/5 . 4/6 . 1/10 . 5/4
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waste fixed with pieces and molten   Bxtra only for bend   Do. junctions an   Do. cleaning doc   Do. cleaning doc   PLASTERER—Lime and hair   Do.   Do.   Sirapite   Do.   Do.   Portland   Do.   Do.   Portland   Do.   Do.   Reenes   Dubbing   Metal lathing   6" × 6" × ½" Earth   quantity, white, an   Rounded edge. Extra   Angles in ditto   Cutting and fitting. A   Narrow widths. 3"   Ditto. 6"   Sundry labours po   Quirk 2½d. Arris 3   Flush bead 1/5.	nails ilead joint ilead joint ilead joint ilead joint ilead joint ilead ilead joint ilead	Render a Ditto floa Skimmin Render a Render fl Backing o Plain face Floor ser Skimmin Thick or mesh × Plain C (on preparation) C (in preparation)	nd set at and set loat and set less 24 Gaudiared so 34d 34d 40%	4/6 2/7 2/4/- 2 6/6/6 1 2/4 3 6et I ditto Tiles, reed) L. pet	6/8 for 0.0/9 6/8-6/- 8/- yard : in fair foot calt calt ain su	super 5/4 6/9 3/6 6/11 8/10 4/1 6/11 4/5 4/6 1/10 5/4 run 10 orface.
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POLISHING NEW WORK— Foo	ot super	Sashwork Foot run
Staining, bodying-in and French Polish	2/5	1/7
Staining and wax polishing on hardwood OLD WORK—	1/1	9d.
Cleaning down old work and repolish Stripping, preparing and repolishing	11 <i>d</i> . 2/8	1/10

INTERNA	L PAIN	TING			
With white	lead base	in common	colours,	with	brushes.
		Knot I	Prime	Prime	. A

	Knot	Prime	Prime	Add for each
ON WOOD-	and prime	paint	paint twice	extra
General surfaces	2/4	4/7	6/4	1/8 Yard super

Running lengths not				
exceeding 3" wide 3½d.	61d.	9d.	214	Yard run
Do. 3" to 6" wide 5d.	91d.	1/-		do.
Do. 6" to 9" wide 71d.	1/13			do.
Do. 9" to 12" wide 101d.	1/6		61d.	do.
Sash square each side 4/11	8/5	11/4	2/11	per doz.
Do. in large squares 7/1	12/-	16/2	3/10	do.
Opening edges 7d.	1/2	1/9	7d.	each.
Casement frames			-	
each side 42d.	81d.	1/-	3d.	Yard run
Mullions or tran-		- 1-		
somes, do. $ 6\frac{1}{2}d.$	$11\frac{1}{2}d$ .		-	do.
ON PLASTER—	One	Two	Thre	e
	coat	coats		
Paint on surfaces	2/4	4/4	6/-	Per Yard
75				super
Do. on mouldings	2/8	5/2		
Do. on enrichment	4/6	8/6	11/-	do.
ON STEEL—				
Paint on structural steel		3/9	5/3	do.
Do. on roof trusses	3/3	6/4	8/9	do.
Do. on metal windows				
measured over all on both			-1-	
sides, divided into squares	3/-	5/2	7/3	do.
Do. divided into large	0.17	* 146	# 10	
squares	2/7	4/5	5/9	do.
Do. divided into extra	2/1	2.0	4/11	4
large squares		3/8		do.
Do. on opening edges Do. on rain water pipe	9¾d. 7d.	1/32	1/11	each Yard run
Do. on do. gutter	1/-	2/1	2/10	do.
Do. on small pipe		51d.		
and the same property	~ gu.	224.	244	Law.

GLAZING (to Polished Plate	Glass ordinar	y substance	(about	lin),	glazing
quality, in the f	ollowing sizes,	glazed comp	lete-	Per foo	t super
	exceeding 2 fee			4/9	
Do.	5 fee	t do.		5/3	7

Do. 5 feet do. . . 5/7
Do. 45 feet do. . . 6/3
Do. 100 feet do. . . 6/8

Add extra price for glazing with screw beads or clips 3d. per foot super.
Do. if glazing bedded in washleather or velvet 6d. per foot run.

SHEET GLASS glazed, work:	comp	lete,	per foot 24 oz		
Ordinary quality clear	alazed	to )		20 02	200
wood with putty in ar				1/111	2/21
feet super in the aggre			1128	TITTA	如一年五
Do 200 fast do	gate	,	1/73	1.703	2/03
Do. 200 feet do			1/42	1/22	2/01
Do. 200 feet do	* *		1/6	1/81	1/111
Figured rolled and Catl	hedral,	glaze	ed to woo	d with	putty in
100 foot super areas in					
*	00 0		Per foot		1/111
Do, in standard tints			do.		2/74
Fluted, glazed do.			do.		2/31
Reeded (narrow, broad,					2/31
Reedlyte do					2/3
Spotlyte do					2/21
in Rough cast do.			do.		2/21
in Do. wired do			do.		2/31
lin Georgian Rough Cas			do.		2/4
Add for glazing all as	before	but t	o steel to	similar	work as
above, 2d. per superficial	foot.				

PAINTER AND DECORATOR
DISTEMPERING—In common colours, put on with brushes—
ON PREPARED SURFACE.

·	1 coat	2 coats		
per yard super-			fc	
	(finish)	(under-	Sealing	Stipp- ling
Ordinary distemper on fl	at	and finish	1)	
surface of plaster	. 7 bd.	1/2	5d.	2d.
	of	-,-		
plaster	. 101d.	1/7	5d.	24.
Add if in margins, narro		-,-		
mideles as manale	. 30%	30%	20%	50%
Add if on mouldings	. 50%	50%	45%	_
Add if on enrichments	. 160%	160%	115%	

PAPERHAN Hanging only-	 G	Per	piece-	_	Lining	Pattern
On walls	 				6/-	7/2
On Stairs	 				8/2	9/6
On onilings					710	0/4

Notes below give basic data of contracts open under locality and authority which are in bold type. References indicate: (a) type of work, (b) address for application. Where no town is stated in the



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## · NEWS •

OPEN

BUILDING

ASHBOURNE U.C. (a) Attested shed, etc., at the Cattle Market. (b) Engineer and Surveyor, King Edward Street. (c) 2gns. (e) May 30.

BARNSTAPLE R.C. (a) 1 pair and 3 blocks of 4 houses at Fremington. (b) A. J. Dennis, The Red House, Castle Street. (c) 2gns. (e) May 12.

BERKHAMSTED U.C. (a) 12 old persons' bungalows and 1 range of 15 garages. (b) Engineer and Surveyor, Civic Centre. (c) 2gns. (e) May 12.

\*BIRMINGHAM C.C. (a) Contract 266. 104 multi-storey flats and shops, The Shardway, Shard End Estate. (b) City Engineer, Civic Centre, 1. (d) May 4. See page 36.

\*BRIGHTON B.C. (a) (Section 5) 63 houses, (Section 6) 69 houses, (Section 7) 54 houses, Woodingdean Estate; and (Site 4) 29 houses, (Site 5) 60 flats, Hollingbury Estate. (b) Borough Engineer, 26-30, King's Road. (c) 2gns each section. (e) May 26. See page 36.

BRISTOL C.C. (a) 3-storey shop at Broadmead and adaptation to shop premises at Broadmead end of Lower Arcade. (b) City Architect, Council House, College Green, 1. (c) 2gns. (d) May 5.

CHERTSEY U.C. (a) Public library and conveniences at Kingthorpe Gardens, Addlestone, and a public convenience at Beomond Garden, Chertsey, with paths, fences, drainage, etc. (b) Engineer and Surveyor, Council Offices. (c) Ign. (e) May 26.

CONSETT U.C. (a) 45 houses, Ebchester Estate. (b) J. J. Eltringham, Derwent Street, Blackhill, Consett. (c) 3gns. (e) May 9.

CUMBERLAND C.C. (a) Conversion of play sheds at Lowca County School to scullery-dining room and stores. (b) County Architect, 15, Portland Square, Carlisle. (e) May 11.

DOVER B.C. (a) 42 houses with site works and drainage, Aycliffe. (b) Borough Engineer, Brook House. (c) 2gns. (e) May 15.

ELLESMERE R.C. (a) 20 houses, Baschurch. (b) A. E. Williams, Kenneth Chambers, Dogpole, Shrewsbury. (e) June 2.

EPPING U.C. (a) 8 garages and approach road, Centre Drive Estate. (b) Council's Surveyor, 91, High Street. (e) May 15.

ESSEX C.C. (a) (1) Junior and infants' school at Bonnygate, Ockendon; (2) Junior and infants' school at Kenningtons, Ockendon; (approx. value of each contract £75,000). (b) County Architect, County Hall, Chelmsford; with full details. (d) May 2.

address it is the same as the locality given in the heading, (c) deposit, (d) last date for application, (e) last date and time for submission of tenders. Full details of contracts marked  $\frac{1}{2}$  are given in the advertisement section.

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application

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F. A. WINTERBURN LTD.
(Incorporating Lither Products)
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FLINTSHIRE C.C. (a) Farmhouse with range of farm buildings, etc., Llawndy Farm, Station Road, Talacre, Ffynnongroew. (b) County Land Agent, 16, Wrexham Street, Mold. (c) 2gns. (e) May 11.

GRIMSBY B.C. (a) Littlecoates School canteen at Elsenham Road. (b) Borough Engineer, Municipal Offices, Town Hall Square. (c) £2. (e) May 11.

HASTINGS B.C. (a) Secondary school at The Grove, St. Leonards-on-Sea. (b) Borough Engineer, 37, Wellington Square. (c) 5gns. (e) June 1.

HAVERHILL U.C. (a) (1) 39 houses at Beech Grove and Western Avenue. (2) 29 houses at Chestnut Grove and Eastern Avenue. (b) J. C. Meyers, Station Road. (c) 2gns. (d) May 4. (e) May 16.

HOOLE U.C. (a) 20 flats, Hoole House Estate. (b) Robert Boot, 22, Newgate Street, Chester. (c) 2gns. (e) May 11.

**IPSWICH B.C.** (a) Extensions to Westbourne Secondary School, Marlow Road. (b) Messrs. Johns and Slater, 32, Foundation Street. (c) 2gns. (d) May 5. (e) May 29.

**IPSWICH B.C.** (a) Castle Hill infants' school, Dryden Road. (b) Messrs. Johns and Slater, 32, Foundation Street. (c) 2gns. (d) May 5. (e) May 29.

LETCHWORTH U.C. (a) 54 houses, Grange Estate. (b) Council's Surveyor, The Council House, Broadway. (e) May 29.

**LLANFYLLIN R.C.** (a) 4 houses with site works at Garthbeibio. (b) R. Arthur Jones, High Street. (c) 2gns. (e) May 16.

LONDON—HENDON B.C. (a) Alterations and additions at Nos. 160 and 162, Station Road, Hendon, N.W.4. (b) Borough Engineer, Town Hall, N.W.4. (c) 2gns. (d) May 4.

LONDON—STEPNEY B.C. (a) War damage reinstatement at Whitechapel Public Library, E.1. (b) Borough Engineer, Municipal Offices, 227-233, Commercial Road, E.1. (e) May 18.

LONDON—WEST HAM B.C. (a) Contract 188. Extensions to "West Ham Lodge," Avenue Road, Harold Wood, Essex. (b) Borough Architect, 70, West Ham Lane, E.15. (c) 2gns. (d) May 2.

N. IRELAND — MAGHERAFELT (LONDONDERRY). (a) New store for Magherafelt Co-operative Agricultural Society, Ltd. (b) Messrs. W. and M. Given, 1, Waterside, Coleraine. (e) May 9.

N. IRELAND—NEWRY U.C. (a) 36 dwellings, Armagh Road Estate. (b) Town Clerk, Council Offices, Town Hall. (c) £3. (e) May 27.

N. IRELAND—OMAGH U.C. (a) (Group No. 1) 17 houses at M'Aleer's Field; (Group No. 2) 29 houses at Blair's Field; (Group No. 3) 26 houses at M'Causland's Field; (Group No. 4) site works and services. (b) A. G. Crawford, 1, Lombard Street, Belfast. (c) 5gns. (e) May 20.











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OAKHAM R.C. (a) (1) 12 houses with site services and (2) block of 6 garages with site services, at Empingham Road site, Exton. (b) H. W. Kelham, 31, Broad Street, Stamford, Lincs. (c) 1gn. (e) May 9.

POOLE B.C. (a) 24 dwellings at the junction of Mossley and Astbury Avenues (Contract W.14). (b) Borough Engineer, Municipal Buildings. (c) 2gns. (e) May 12.

PORTSMOUTH C.C. (a) Extensions to St. Vincent Lodge, Southsea. (b) City Architect, Municipal Offices, 1, Western Parade, Southsea. (c) 3gns. (d) May 4.

PORTSMOUTH C.C. (a) 66 flats and 72 maisonettes at Lake Road. (b) R. A. Thomas, Buckingham House, High Street. (c) 3gns. (d) May 5,

\*RUGBY B.C. (a) Public convenience at Assheton Children's Playground, Bilton. (b) Borough Surveyor, Burford House, Church Walk. (c) 2gns. (e) May 22. See page 36.

ST. ALBANS C.C. (a) Block of 6 shops with 12 flats above at St. Julian's site, and block of 10 shops with 20 flats above at New Green site. (b) City Engineer, 16, St. Peter's Street. (c) 2gns. (e) June 2.

SCOTLAND—GIRVAN B.C. (a) 32 houses on Mote site. (Separate trades.) (b) Town Clerk, Town Clerk's Chambers, Giryan.

SCOTLAND—TRANENT T.C. (a) 26 houses at Balfour Square site. (Separate trades.) (b) Town Clerk, Tranent.

WARE R.C. (a) 10 pairs of houses and 4 pairs of houses, with site works, Standon site. (b) Council's Surveyor, 97, New Road. (c) 2gns. (d) May 4.

WATFORD R.C. (a) 90 dwellings at Cecil Lodge, Abbots Langley. (b) Messrs. Dawe, Carter and Partners, 33, Clarendon Road. (c) Ign. (d) May 9.

WORCESTER C.C. (a) 3-storey block of 6 shops and 6 maisonettes at Newtown No. 2 Estate. (b) City Engineer, 22, Bridge Street, (c) 3gns cheque payable to Corporation. (e) May 20.

#### PLACED

Notes on contracts placed state locality and authority in bold type with (!) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

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WESTMINSTER CITY COUNCIL. WESTMINSTER CITY COUNCIL. (1) Blocks 18 and 26 of flats. (2) Churchill Gardens. (3) Gee, Walker and Slater, Ltd., 100, Park Lane, London, W.1. (4) £198,417.

BRADFORD CITY COUNCIL. 196 houses. (2) Thorpe Edge Estate. (3) John Laing and Son, Ltd., Dalston Road, Carlisle. (4) £293,867.

SWANSEA. (1) Erection of stores. (2) Princess Way. (3) Staverton Builders, Ltd., Totnes, Devon. (4) £125,000.

NORWICH CORPORATION. (1) 146 houses. (2) South Tuckswood Estate. (3) R. G. Carter, Ltd., Drayton, Norwich. (4) £167,779. (1) 116 houses. (3) Burrell Bros., 82, Bowthorpe Road, Norwich. (4) £143,431.

NUNEATON B.C. (1) 101 houses. (2) Camp Hill. (3) Coltman and Son, 57, Castle Street, Coventry. (4) £124,181. (1) 50 houses. (3) F. H. Pallett, Nuneaton. (4) £61,779.

STRETFORD B.C. (1) 57 flats. (2) Milton Close. (3) Humphrey Park Estates, Ltd., Urmston, Lancs. (4)

MIDDLESEX C.C. (1) Secondary grammar school. (2) Ruislip. (3) Holland & Hannen and Cubitts, Ltd., 1, Queen Anne's Gate, London, S.W.1. (4) £166,066.

BRIGHTON CORPORATION. (1) 105 and 109 dwellings. (2) South Woodingdean Estate. (3) Rice and Sons, Ltd., 23, Gloucester Place, Brighton, 1. (4) £146,718 and £152,500.

READING CORPORATION. Secondary school. (2) Stoneham. (3) Boyd and Murley, Ltd., 87, London Road, Reading. (4) £187,150.

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GUILDFORD R.D.C. (1) 42 houses. (2) Tongham. (3) E. Clarke and Sons, Ltd., Addlestone, Surrey. (4) £60,550.

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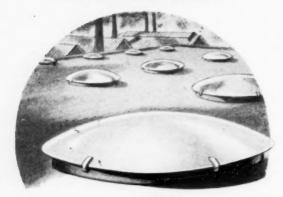
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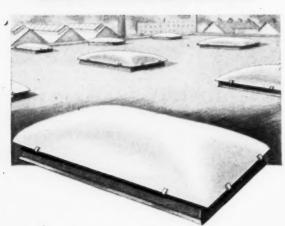
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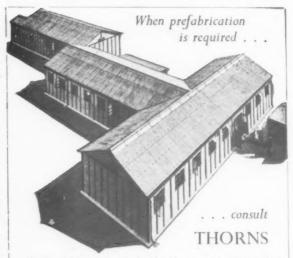
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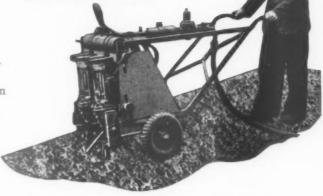
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#### LONDON COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

ARCHITECTS (A.R.I.B.A.), in the Housing and Schools Divisions. (a) Grade II (£837 10s-£1,002). (b) Grade III (µp to £837 10s). Application forms and particulars from Architect AR/EK/H & S./3, County Hall, S.E.1. Closing date 15th May. (399)

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APPOINTMENT OF CLERK OF WORKS.

A PPLICATIONS are invited for the appointment of a CLERK OF WORKS for Rural Housing

of a CLERK OF WORKS for Rural Housing Schemes.
Salary £10 10s per week, plus travelling allowance. Housing accommodation can be made available if required.
Applicants should have a thorough technical training in building construction and experience in carrying out of building constructs.
Applications, endorsed "Clerk of Works—Housing," stating qualifications and accompanied by copies of three recent testimonials, must reach the undersigned not later than the 16th May, 1953.
T. MORGAN,
Clerk of the Council.
Rural Council Offices,
Bigby Street,
Brigg, Lincs. [7045]

#### BOROUGH OF DARTFORD.

TEMPORARY JUNIOR ARCHITECTURAL ASSISTANT

APPLICATIONS are invited for the appointment of TEMPORARY JUNIOR ARCHITECTURAL ASSISTANT in the Borough Surveyor's Department. Salary to be in accordance with the National Joint Councils Scheme of conditions of service, Grade A.P.T. II. Applications, stating age, qualifications and experience of present and previous appointments, with copies of three recent testimonials, must be received by me not later than the 16th May, 1953.

THOMAS ARMSTRONG.

Town Clerk Council Offices, Dartford, Kent 17047

#### BOROUGH OF BERWICK-UPON-TWEED.

BOROUGH SURVEYOR'S DEPARTMENT

A PPLICATIONS are invited for the appointment of a TEMPORARY ARCHITECTURAL ASSISTANT for Housing Schemes.

Applications endorsed "Architectural Assistant," stating age, training, experience and salary required, to be delivered to the undersigned, with names of referees or copies of testimonials, not later than 4th May, 1953.

I ARMITAGE

J. ARMITAGE, Borough Surveyor

, Municipal Buildings, Wallace Green.

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#### APPOINTMENTS-contd.

THE UNIVERSITY OF MANCHESTER

APPLICATIONS are invited for TWO LECTURESHIPS IN TOWN AND COUNTRY PLANNING and a LECTURESHIP IN ARCHITECTURE. Applicants must have had appropriate practical experience. Salary on a scale £500-£1,100 per annum with membership of F.S.S.U. and Children's Allowance Scheme. Initial salary according to qualifications and experience. Applications should be sent not later than 23rd May, 1953, to the Registrar, the University, Manchester, 13, from whom further particulars and forms of application may be obtained.

#### WHITLEY BAY URBAN DISTRICT COUNCIL

APPOINTMENT OF ARCHITECTURAL ASSISTANT

A PPLICATIONS are invited for the appointment of ARCHITECTURAL ASSISTANT on salary scale A.P.T. V. Applicants must be Associates of the Royal Institute of British Architects and have had previous experience of housing

ciates of the Royal Institute of British Architects and have had previous experience of housing scheme design.

The appointment will be subject to one month's notice in writing on either side, and to the terms of the National Joint Council's Scheme of Conditions of Service and the provisions of the Local Government Superannuation Act, 1937. The successful candidate will be required to pass a medical examination.

Housing accompositation will be provided if

Housing accommodation will be provided if quired.

Applications, giving age, qualifications and experience, and the names and addresses of two persons to whom reference may be made, should be sent to E. Roberts, A.M.I.C.E., Engineer and Surveyor, Council Offices, Whitley Bay, not later than Tuesday, 19th May, 1953.

Canvassing, directly or indirectly, will be a disqualification.

ARTHUR S. RUDDOCK.

ARTHUR S. RUDDOCK,
Clerk of the Council. Council Offices, Whitley Bay, 21st April, 1953. [7055

#### CONTRACTS

#### COUNTY BOROUGH OF BRIGHTON.

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ing work:— WOODINGDEAN ESTATE SEC. 5 (63

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5. HOLLINGBURY ESTATE SITE 5 (60
FLATS).
Bills of Quantities and forms of tender may be obtained from the Borough Engineer & Surveyor, 26-30, Kings Road, Brighton, on or after Saturday, 25th April, on receipt of a returnable deposit of £2 2s for each section.
Tenders are to be delivered to the Town Clerk in plain sealed envelopes by 12 noon on 26th May, 1953.

J. G. DREW. Town Clerk. [7043

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ASSHETON CHILDREN'S PLAYGROUND, BILTON,

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#### CONTRACTS-contd.

CITY OF BIRMINGHAM.

HOUSING CONTRACTS

CONTRACT 266—104 MULTI-STOREY FLATS AND SHOPS. THE SHARDWAY—SHARD END ESTATE.

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Building Contractors in a position to tender for this scheme should apply to Herbert J. Manzoni, City Enginger & Surveyor, Civic Centre, Birmingham, 1, by the 4th May, 1953.

J. F. GREGG, Town Clerk.

The Council House, Birmingham, 1. [7048]

#### URBAN DISTRICT COUNCIL OF FELLING

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FOLLONSBY LANE, in the Urban District of Felling.

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Tenders, in plain sealed envelopes, endorsed "Sewage Disposal Works—Contract F.2," must be delivered to the undersigned not later than Noon on 27th MAY, 1953.

The successful contractor will be required to enter into an approved form of contract and bond for the due execution of the works.

The Council do not bind themselves to accept the lowest or any Tender.

JOHN DONKIN, Clerk of the Counc

Council Buildings,

elling, Gateshead, 10, 13th March, 1953. [7058

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ARCHITECTURAL Assistant, preferably with experience of contemporary detailing, especially of interior fitments and shop fitting, required immediately by Patrick Gwynne, to work at The Homewood, Esher. Ring Esher 3310. [7054]

wood, Esher. Ring Esher 3310. [7054]
A RCHITECTURAL assistant required for busy country practice, up to Inter. R.I.B.A. standard, with experience in preparing working drawings, details and specifications.—Write stating age, training, experience and salary required, to Edwin H. Earp & Badger, L./A.R.I.B.A., Scholars Lane, Stratford-on-Avon. [7057]

#### SITUATIONS VACANT

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[7052]

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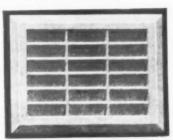
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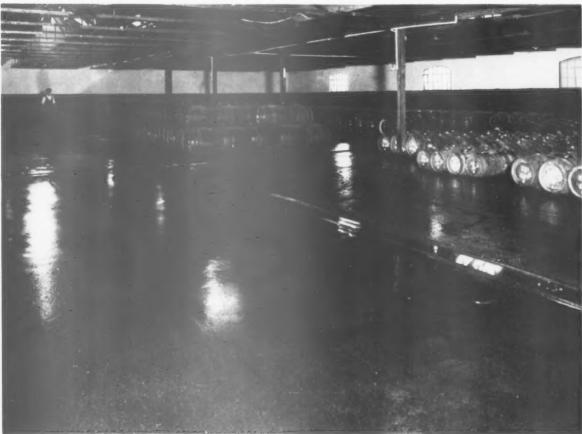
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